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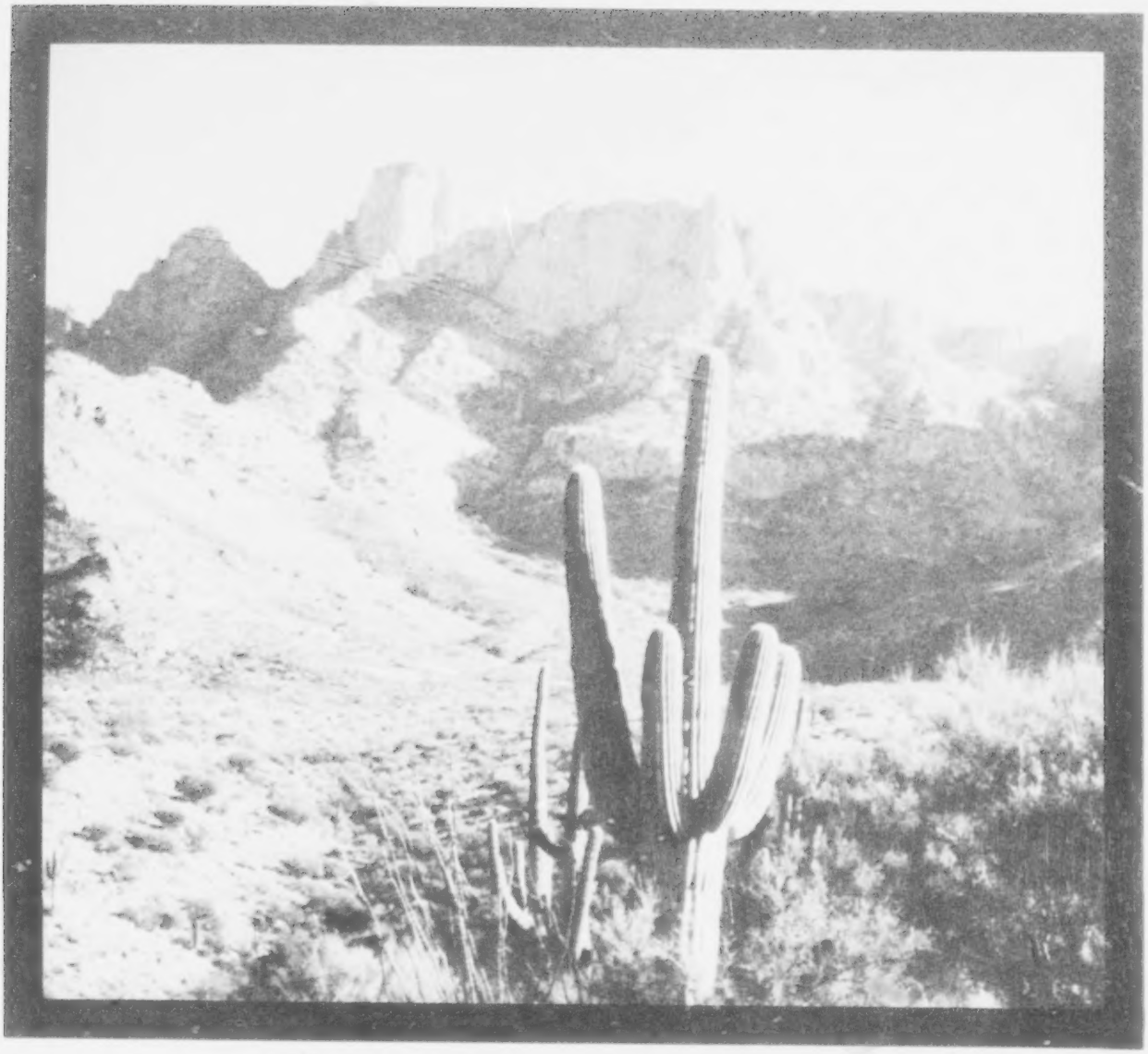
Coronado National Forest Plan



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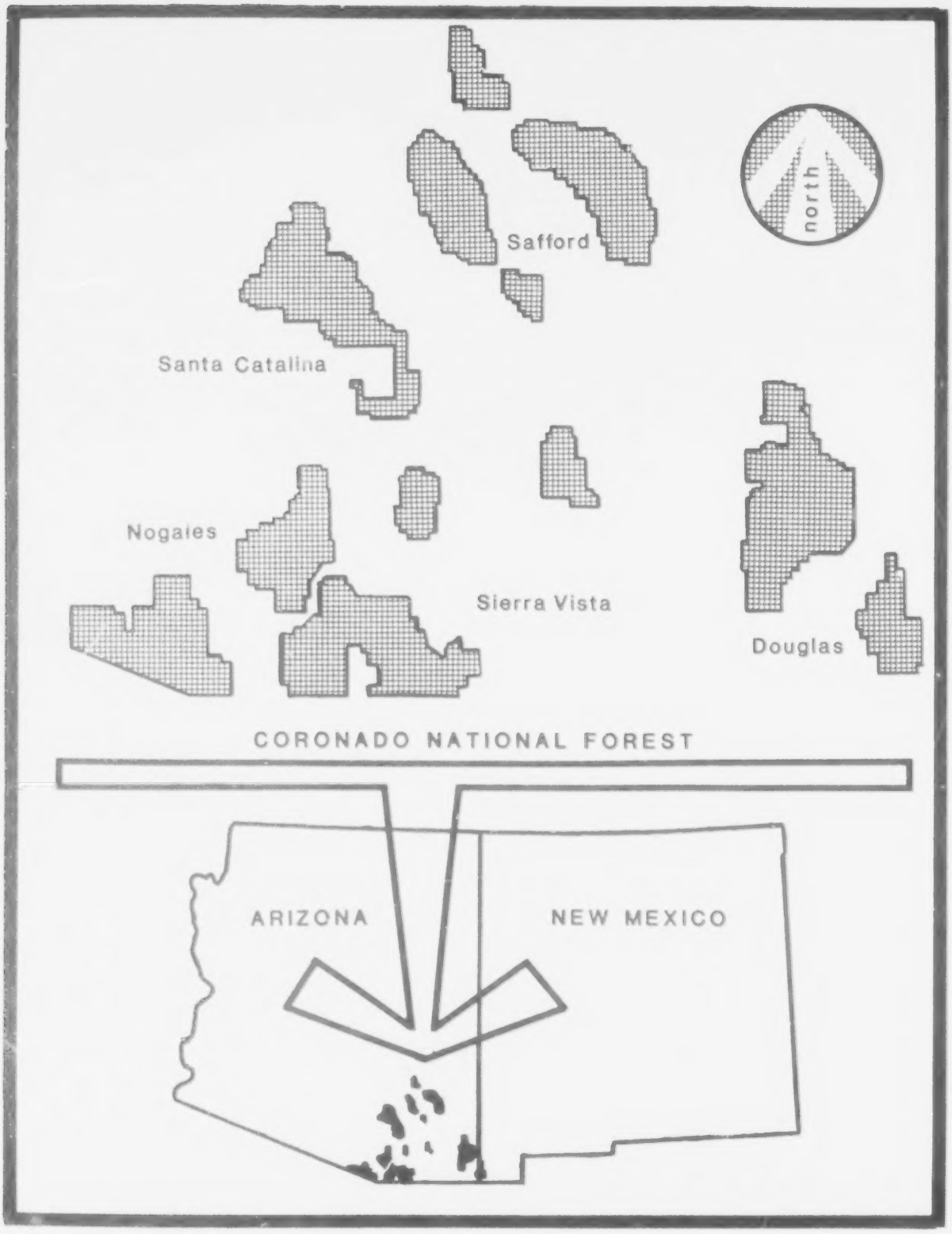

Coronado National Forest
Land and Resource Management Plan

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1. Introduction

PURPOSE OF THE PLAN

This Plan defines the direction for managing the Coronado National Forest for the next 10-15 years.

The Plan provides for integrated multiple use and sustained yield of goods and services from the Forest in a way that maximizes long-term net public benefits in an environmentally sound manner.

Preparation of the Forest Plan is required by the Renewable Resources Planning Act (RPA), as amended by the National Forest Management Act (NFMA).

The Forest Plan replaces all previous resource management plans prepared for the Forest. Upon approval of the Forest Plan, all subsequent activities affecting these lands, including budget proposals, will be based on the Forest Plan (36 CFR 219.10 (e)). In addition, all permits, contracts, and other instruments for the use and occupancy of these National Forest System Lands must be consistent with the Forest Plan (36 CFR 219.10 (e)).

The planning principles in the NFMA regulations (36 CFR 219.1(b)) were integrated throughout the process. These principles are:

(1) Establishment of goals and objectives for multiple-use and sustained-yield management of renewable resources without impairment of the productivity of the Land;

(2) Consideration of the relative values of all renewable resources, including the relationship of nonrenewable resources, such as minerals, to renewable resources;

(3) Recognition that the National Forests are ecosystems and their management for goods and services requires an awareness and consideration of the interrelationships among plants, animals, soil, water, air, and other environmental factors within such ecosystems;

(4) Protection and, where appropriate, improvement of the quality of renewable resources;

(5) Preservation of important historic, cultural, and natural aspects of our national heritage;

(6) Protection and preservation of the inherent right of freedom of American Indians to believe, express, and exercise their traditional religions;

(7) Provisions for the safe use and enjoyment of the forest resources by the public;

(8) Protection, through ecologically compatible means, of all forest and rangeland resources from depredations by forest and rangeland pests;

(9) Coordination with the land and resource planning efforts of other Federal agencies, State and local governments, and Indian Tribes;

(10) Use of a systematic, interdisciplinary approach to ensure coordination and integration of planning activities for multiple-use management;

(11) Early and frequent public participation;

(12) Establishment of quantitative and qualitative standards and guidelines for land and resource planning and management;

(13) Management of National Forest System Lands in a manner that is sensitive to economic efficiency; and

(14) Responsiveness to changing conditions of land and other resources and to changing social and economic demands of the American people.

Land management prescriptions, standards, and guidelines are a statement of the Plan's management direction. Projected output, services, and rates of implementation are, however, dependent on the annual budget process. Implementation schedules can be changed to reflect annual budget and amended accordingly after appropriate public notification.

ORGANIZATION OF THE PROPOSED FOREST PLAN DOCUMENT

Chapter 2 of the Forest Plan describes the major issues and concerns. Chapter 3 summarizes the AMS. It depicts the current levels of goods and services produced, and projects supply and expected future use on the Forest. Chapter 4 details the mission, goals, objectives, proposed vicinity, and timing of management practices; projects the conditions of the Forest by the end of the fifth period from implementation of the Plan; and describes management direction and prescription and associated resource management standards and guidelines. A management area map, keyed to the prescriptions in Chapter 4 is included with the EIS/PLAN package. Chapter 5 is a summary of fire management activities. Chapter 6 is the monitoring plan.

2. Issues, Concerns, and Management Opportunities

OVERVIEW

Issues, concerns, and opportunities have been identified for the Coronado National Forest. The Forest Plan and alternatives are designed to respond to these issues as well as to RPA Program objectives assigned to the Forest in the Regional Guide.

Issues, concerns, and opportunities were identified from comments solicited from the public and Forest Service employees. Comments were received at a number of public involvement workshops and in response to an information brochure mailed to the public in 1978.

Comments received were analyzed in a scoping process to determine issues and concerns most relevant to the planning process (40 CFR 1501.7). Content analysis was used to extract substantive comment from both written and workshop responses. A list of final issues and concerns was compiled.

An initial draft EIS was released in December of 1982. The public was asked to comment on the alternatives and proposed action. Over 2,500 responses were received which substantiated many of the original ICO's and caused some to be modified.

Direction from the Secretary of Agriculture prompted another public involvement phase relative to the wilderness issue and the re-evaluation of roadless areas. During August, 1983, statewide and local meetings were held on various Arizona National Forests. By conclusion of the comment period on September 30, 1983, many responses had been received relative to the roadless area re-evaluation.

Refer to Appendix A of the E.I.S. for a detailed discussion of public involvement.

The following describes the major issues and concerns which were selected to be addressed in the planning process. The way in which the Forest Plan responds to them is displayed in the E.I.S.

ISSUES, CONCERNS AND OPPORTUNITIES ADDRESSED

Management concerns and issues are termed "issues" and described below. The thirty-six issues were grouped into fourteen subject matter areas. The issue of potential wilderness designation for contiguous BLM administered lands is not pertinent to implementation of this plan and is not displayed here.

Recreation and Visual Quality

As local and tourist populations increase in the Coronado's zone of influence, the demand for outdoor recreation on the National Forest can be expected to continue to exceed the ability of the Forest Service to provide needed services. Several issues are generated by this situation as follows:

1. Identification of potential overuse areas and establishment of carrying capacities (number of people who can use an area without damage to natural resources).

2. Regulation of Off-Road Vehicle use to protect other Forest resources and uses, while continuing to provide this much demanded recreational opportunity.

3. Use of land for recreational development and dispersed uses, and establishment of equitable fees for recreational use.

4. The role of the private sector in providing recreation services on and adjacent to the National Forest must be reassessed.

5. Inventory and management planning for the Coronado's many caves, and location of this resource to recreational, scientific, and wilderness uses.

6. Visual resource integrity in all land management decisions.

Wilderness

Potential designation of portions of the Coronado for wilderness has long been studied and debated. Recent wilderness bills for both New Mexico and Arizona have made this allocation for most areas under consideration for the duration of this plan. The two bills directed further study on three of the Forest's areas. Two wilderness related issues are:

1. Formulation of a recommendation to Congress concerning wilderness status for the Bunk Robinson, Whitmire Canyon, and Mt. Graham Wilderness Study areas.

2. Within the constraints of the Wilderness Act, decisions are needed concerning intensity of management and investment for recreation, range, wildlife habitat, and fire management (including planned ignitions) within wilderness areas.

Cultural Resources

Arizona and New Mexico have a wealth of historic and prehistoric cultural resources. Although all such resources are currently protected from disturbance by law, many people advocate a more aggressive approach to management of cultural values. The issue is:

1. The amount of time and investment to interpretation of cultural sites.

Wildlife and Fish

The diversity of plants and animals found on the Coronado is unique in the National Forest System. This uniqueness, coupled with a great deal of local and national interest in this resource, generates a complex management opportunity. Five issues involving wildlife management follow:

1. The amount of time and resources to be given between threatened, endangered, or unique species; and other flora and fauna.

2. Critical wildlife habitat must be identified, along with needed controls on other uses (mineral extraction, recreation, etc.).

3. Appropriateness of predator and rodent control, when and where.

4. Fishing lakes which will be maintained, and consideration of any new construction.

5. Maintenance and improvement of the wildlife habitat for future generations in conjunction with other Forest activities.

Range

Grazing by domestic livestock is a major use of the Coronado. As demand for other uses increases, potential for conflicts between uses grows. This generates two planning issues:

1. Managing Forest lands for grazing in relation to other uses.

2. Where permitted use exceeds capacity, an appropriate combination of management changes and numbers adjustments must be determined. Scheduling of needed changes is also important.

Timber and Forest Products

Sawtimber production on the Coronado is low compared to most other National Forest Forests, but products such as fuelwood, posts, poles, Christmas trees, and beargrass are significant to local users. Silvicultural techniques are a valuable tool for accomplishment of range, wildlife, watershed, recreation, and visual quality objectives. Timber related issues are:

1. Distribution of forest products between commercial users and personal use and availability of permits to non-citizens.

2. Timber harvest amount and objectives.

3. Silvicultural systems and harvest techniques; including clear cutting, snag management, timber stand improvement, reforestation, and harvest of green or dead fuelwood.

Plant and Animal Diversity

Because of its unique geographical location, the Coronado includes an unusually wide diversity of vegetation. Wild animals are habitat dependent, and therefore animal diversity tends to be proportional to plant diversity. In the past vegetation has been manipulated through fire management, grazing, direct plant control, etc. Issues involve further manipulations and uses of the diverse ecosystems as follows:

1. Location and extent of vegetative manipulation.

2. Selection of species for revegetation.

3. Management of uses and management practices in riparian areas.

Soil and Water

Much of the water used in Southern Arizona and New Mexico originates on the mountain watersheds of the Coronado. Competition for available water is rapidly increasing, and concern is growing about quantity, and quality. The issue can be stated as follows:

1. Management of forest resources to protect or enhance watershed condition from both a hydrologic function and soil productivity standpoint.

Minerals

The Southwestern United States continues to produce a significant portion of the nation's mineral supply.

Extraction of minerals has a potential to disrupt other Forest values, if not carefully regulated. In a few sensitive areas it is necessary to exclude mineral activity. The issue can be stated as follows:

1. Identification of sensitive areas and formulation of recommendations for needed withdrawals from mineral entry.

Lands and Special Uses

While the Coronado is substantially solid blocks of federal land, there are areas where lands would be better suited for private uses or where administration is made more costly because of the ownership pattern. Conversely, some included private lands are of a National Forest character. Demand for a wide variety of special uses of the Forest continues to grow. Three issues are listed:

1. Revision of land ownership adjustment plans to update lands desirable for acquisition and available for disposal.

2. Allocation of National Forest land for special uses such as; commercial development, summer homes, utility corridors, scientific study sites, roads, apiary sites, ski areas, etc.

3. Management of National Forest land for astrophysical research purposes on Mt. Graham. This issue and the specific concerns and opportunities related to it are being analyzed in a separate Environmental Impact Statement.

Special Area Designations

The biological uniqueness of the Forest generates a great deal of interest in the area for scientific study and for designation of special management areas to protect biological communities and habitats. Two types of special areas are under consideration:

1. Management of land as Zoological-Botanical Areas to protect biological uniqueness through modified management practices.

2. Management of land as Research Natural Areas to provide opportunities for study of natural ecological processes in undisturbed areas.

Protection

Many years of intensive fire control has resulted in significant changes in vegetative composition of the Coronado. In some cases this shift has been towards a less desirable plant community with attendant increase in fire hazard, decrease in forage production, and declining wildlife habitat. As management philosophies have evolved toward fire management, as opposed to control; there is increasing support for a more natural role of fire in the ecosystem. Use of fire as a tool for changing and maintaining vegetative diversity continues to enjoy strong local support. Proposed fire management policies address the following issues:

1. Use of fire as a management tool, including planned ignitions, prescribed natural fire, and management of wildfires.

2. Appropriateness of suppression actions under varying conditions and locations.

Facilities (Roads and Trails)

Access to Forest lands is becoming increasingly restricted as development occurs on adjacent lands and as users cause increasing damage on neighboring private land. The Forest transportation system has deteriorated over the past ten years while use has drastically increased. Several access-related issues are apparent:

1. Need for adequate legal rights-of-way to allow public access to the National Forest for all legal uses.

2. Commitment of resources to construction and maintenance of an adequate system of roads and trails (including signing) for Forest users.

3. Resolution of conflicts between trail users (hikers, horses, motorized vehicles).

4. Degree of public access to special use areas. Involves a legitimate need to protect valuable improvements versus the public's right to access to public land.

Law Enforcement

National Forests are perceived as places to escape the pressures of urban living and relax in a peaceful atmosphere. Most forest visitors prefer a great deal of freedom from burdensome regulations, but at the same time expect a climate of "law and order". This creates a challenge in development of an agency law enforcement posture. Proposed Law Enforcement policies address:

1. Degree of regulation of forest users, and identification of areas needing more intensive enforcement efforts.

3. Summary of the Analysis of the Management Situation

OVERVIEW

An Analysis of the Management Situation (AMS) was prepared and documented in 1982 as a means of determining the productive capacity of the Forest to supply various goods and services. The supply potentials are based primarily upon benchmark analysis. Copies of the AMS are filed at Ranger District offices, the Forest Supervisor's Office, and the Regional Office.

This chapter summarizes the AMS. Supply and projected future use for various Forest goods and services have been analyzed to identify necessary improvements, resolve current public issues, and prevent future conflict. The goal of the Plan is to identify the level and type of Forest uses that would help meet projected future use while enhancing or maintaining resources in a cost effective and integrated resource manner.

Table 1 displays the estimated average annual outputs resulting from implementation of the Forest Plan in the first and fifth decades. For purpose of comparison, the total available supply for each output and the demand for each output are estimated for both the first and fifth decades. The supply potential is estimated from benchmark alternatives that maximize each resource use while meeting at least the minimum management requirements for other resources. Demand estimates are based on identified National, Regional, and local needs.

Table 1. Comparison of the Forest Plan Outputs with Supply and Projected Future Demand

Resource Output	Average Annual Unit of Measure	Forest Plan		Supply		Projected Future Demand	
		Period 1	Period 5	Period 1	Period 5	Period 1	Period 5
Sawtimber Sales	MCF	576	576 [1/]	798	798	75	91 [3/]
	MBF	2880	2880	3990	3990	375	455
Firewood (Sold and Free Use)	MCF	212	230	252	250	1360	1360 [4/]
	MBF	1060	1150	1260	1250	6800	6800
Grazing Capacity	MAUM	333	360	348	406	NA	NA
Permitted Livestock Use	MAUM	350	360	357	406	401	449 [5/]
Wilderness Recreation	MRVD	343	758	368	813	254	1005
Developed Recreation	MRVD	1317	1565	1547	2715 [2/]	1440	3179
Dispersed Recreation	MRVD	815	1798	856	1888	1013	2237
Wildlife Recreation	MRVD	330	646	356	715	386	853
Water	MAcFt.	108	108	108	110	88	105 [5/]

[1/] Includes total available volume. Actual sales may be less depending on market conditions.

[2/] Supply was limited to previously inventoried potential sites.

[3/] Projections based on local sawmill capacity.

[4/] Projections based on 1980 actual sales before limits were established.

[5/] Projections based on 1980 RPA targets as assigned by Regional Guide.

4. Management Direction

MISSION

The broad base for management of the Coronado National Forest is provided through a general Mission Statement:

> MANAGE THE RESOURCES OF THE CORONADO NATIONAL FOREST UNDER MULTIPLE USE AND SUSTAINED YIELD PRINCIPLES TO PROVIDE FOR BALANCED CONTRIBUTIONS TO THE NATIONAL WELFARE AND TO THE ECONOMIC AND SOCIAL NEEDS OF THE PEOPLE OF SOUTHEAST ARIZONA AND SOUTHWEST NEW MEXICO. MANAGEMENT PROGRAMS ARE TO BE ORIENTED TO MAINTAIN CULTURAL VALUES AND A VIABLE RURAL ECONOMY.

GOALS

A goal is defined as "a concise statement of the state or condition that a land and resource management plan is designed to achieve. A goal is usually not quantifiable and may not have a specific date for completion." (36 CFR 219.3). Forest Service activities are grouped into 12 program elements identified by an alphabetic code. Goals have been developed in each of these elements. There are 8 resource elements: (A) Recreation, (B) Wilderness, (C) Wildlife and Fish, (D) Range, (E) Timber, (F) Water, (G) Minerals, and (H) Human and Community Development; and 4 support elements: (J) Lands, (K) Soils, (L) Facilities, and (P) Protection.

The Forest has set the following goals for each resource and support element:

Recreation (A)

Maintain the current spectrum of developed, dispersed, and primitive recreation opportunities and increase those opportunities within the capability of the resources and the framework of this plan as needs and funds develop.

Establish a dialogue with the public to gain their understanding of our goals and objectives and insure their informed participation in our management decisions.

Increase the public's awareness of their obligation to the resource and their responsibility in caring for it.

Work with other government agencies and private sector to secure public access to recreation resources.

Work with Regional Office and research in development of process to establish recreation capacities.

Nurture partnership with other recreation agencies, the private sector, and professional organizations, to develop a full spectrum of recreation opportunities in Southern Arizona and Southwest New Mexico.

Maintain or enhance the visual resource through sound landscape management principles.

Inventory, protect, manage, and interpret cultural resources.

Identify, evaluate, and nominate cultural resource sites to the National Register.

Develop Information Service Programs that will educate, inform, and involve populations of Southern Arizona and Southwest New Mexico in management and enjoyment of the forest.

Wilderness (B)

Manage existing wildernesses to preserve and protect the wilderness character in accordance with the various Wilderness Acts.

The Bunk Robinson and Whitmire Canyon Wilderness Study Areas will be recommended for nonwilderness management. The Mt. Graham Wilderness Study Area will be recommended for wilderness designation.

These recommendations are preliminary administrative recommendations that will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States.

Final decisions on wilderness or nonwilderness designations have been reserved by the Congress to itself.

Until Congress makes a decision, the three WSAs will be managed under the direction prescribed for Management Area 9 to maintain the existing wilderness character and potential for inclusion in the National Wilderness System.

Wildlife and Fish (C)

Provide habitat for wildlife populations consistent with the goals outlined in the Arizona and New Mexico Department of Game and Fish Comprehensive Plans and consistent with other resource values.

Provide for ecosystem diversity by at least maintaining viable populations of all native and desirable nonnative wildlife, fish and plant species through improved habitat management.

Improve the habitat of and the protection for local populations of Threatened and Endangered species to meet the goals of the Endangered Species Act of 1973.

Range (D)

To restore rangeland to at least a moderately high ecological condition (70% to 75% of potential production, fair range condition) with stable soil and a static or upward trend.

Produce livestock products consistent with other resources and uses.

Eliminate grazing from areas not capable of supporting livestock without significant detriment to range or other resources.

Balance permitted grazing use with grazing capacity.

Timber (E)

Continue a program that enhances other resource values, and that effectively utilizes the wood fiber produced. Carry out silvicultural practices to improve stand health when such practices are consistent with other resource objectives.

Soil (K) and Water (F)

Secure and provide an adequate supply of water for the protection and management of the National Forest.

Provide a favorable water flow in quantity and quality for off-Forest users by improving or maintaining all watersheds to a satisfactory or higher level.

Minerals (G)

Support environmentally sound energy and minerals development and reclamation.

Human and Community Development (H)

Use human resource programs to meet the goals and objectives for resources and activities.

Lands (I)

Use land ownership adjustment to accomplish resource management objectives.

Allow the use of available National Forest lands for appropriate public or private interests consistent with National Forest policies.

Resolve unauthorized occupancy as cases arise.

Obtain rights-of-way needed for resource management objectives.

Protect representative areas identified for the Research Natural Area System.

Facilities (L)

Maintain all facilities to maintain health and safety standards. Provide administrative improvements to meet resource and activity needs.

Identify property lines.

Provide transportation systems to meet land management and resource needs.

Insure that improvements will meet pollution abatement standards.

Protection (P)

Protect life, property and resources from wildfire while using prescribed fire as a tool to meet management objectives.

Through integrated pest management, manage resources to prevent a buildup of insects and diseases.

Cooperate with state and local law enforcement agencies in the protection of visitors, their property and National Forest lands and facilities.

Cooperate with other Federal, state and local regulatory agencies to protect air quality as required by the Clean Air Act.

OBJECTIVES

An objective is defined as "a specific statement of measurable results to be achieved within a stated time period" (36 CFR 219.3 (w)). Forest objectives are quantitative. They are time-oriented outputs that are associated with a given budget level. The objectives are needed to meet missions and goals.

The RPA targets assigned to the Forest by the Southwest Regional Guide are listed for reference. Objectives for the Forest are shown in the following tables - Other objectives are found in the management direction specific to areas of the land.

Table - 2 RPA Targets
Table - 3 Projected Program Outputs and Costs of Forest Plan
Table - 4 List of Recreation Site Construction Needs in Priority Order
Table - 5 List of Recreation Site Reconstruction Needs in Priority Order
Table - 6 Fire, Aviation and Other Facility Construction Schedule
Table - 7 Right-of-way Needs Schedule for Period 1
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Table - 10 Trail Construction and Reconstruction Needs
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Table - 13 Structural and Nonstructural Range Improvements by Period
Table - 14 Average Annual Sawtimber Offering for Period 1
Table - 15 Summary of Vegetative Management Practices

Table 2. Resource Planning Act Targets From Regional Guide By Periods (Average Annual Outputs)

		P1	P2	P3	P4	P5
Developed Recreation	MRVDs	1715	2070	2100	2400	2655
Dispersed Recreation 1/	MRVDs	993	990	1035	1080	1125
Permitted Grazing Use	MAUMs	401	417	429	439	449
Timber Yield		0	0	0	0	0
Wildlife & Fish Habitat Improvement	M.AC.EQ.	12.4	9.4	7.5	4.5	4.2
Water Yield Meeting Quality Goals	MAC.FT.	88	89	102	105	105
Trail Construction & Reconstruction	Miles	3.8	2.8	4.0	5.0	5.4
Reforestation	Acres	119	165	183	203	210
Timber Stand Improvement	Acres	203	25	25	35	47
Mineral Leases & Permits	Operating Plans	192	221	244	281	293
Fuelbreaks & Fuel Treatment	M Acres	1.6	1.9	2.1	2.4	2.6
Land Purchase & Acquisition (Excludes Exchange)	Acres	375	4	4	4	4
Soil & Water Resource Improvement (Improved Watershed Condition)	Acres	712	820	820	820	820

1/ Includes other dispersed, other wilderness, hunting, fishing, and nongame use.

Table 3. Projected Program Outputs and Costs of Forest Plan

Output/Activity	Unit of Measure	Average Annual Units by Periods				
		P1	P2	P3	P4	P5
RECREATION Developed Use (Including VIS)	Thousand Recreation Visitor Days	1317	1451	1508	1540	1565
Dispersed Use (Including Wilderness & Wildlife	Thousand Recreation Visitor Days	1488	1802	2182	2649	3202
Trail Const./ Reconstruction	Miles	1.5	2.5	2.5	2.7	5.5
Arterial and Collector Road Construction & Reconstruction	Miles	8.0	8.0	8.0	8.0	8.0
WILDERNESS 1/ Wilderness Mgt.	Thousand Acres	401	401	401	401	401
WILDLIFE & FISH Wildlife Habitat Improvement(from wildlife funds)	Thousand Acre Equivalents	12.2	12.0	12.0	12.0	13.2
RANGE Grazing Use (Livestock)	Thousand Animal Unit Months	350	338	344	354	360
Grazing Capacity	Thousand Animal Unit Months	333	340	348	355	360
TIMBER Programmed Sales Offered 4/	Thousand Cubic Feet	91	91	91	91	91
	Thousand Board Feet	455	455	455	455	455
Fuelwood 2/	Thousand Cubic feet	212	220	233	231	230
	Thousand Board Feet	1060	1100	1165	1155	1150
Reforestation	Acres	0	0	0	0	0
Timber Stand Improvement	Acres	48	48	48	48	48
WATER 3/ Total Water Yield	Thousand Acre Feet	146	146	146	146	146
MINERALS Minerals Leases and Permits	Operation Plans	281	250	398	398	398
PROTECTION Fuelbreaks and Fuel Treatment	Thousand Acres	4.4	4.4	4.4	4.4	4.4

Table 3. Projected Program Outputs and Costs of Forest Plan (continued)

Output/Activity	Unit of Measure	Average Annual Units by Periods				
		P1	P2	P3	P4	P5
LANDS						
Land Purchase & Acquisition (Excl. Exchange)	Acres	10	10	10	10	10
SOILS						
Soil & Water Res. Improv. (From all funds)	Acres	1053	1053	1053	1053	1053
COSTS - Total Budgeted (1980 dollars)	Millions Dollars	6.00	6.08	6.03	5.98	6.03
Capital Investments (1980 dollars)	Millions Dollars	0.234	0.234	0.234	0.234	0.234

1/ Includes existing areas and new recommendations.
2/ Includes dead and green fuelwood.
3/ Maximum water yield meeting quality standards is 108,000 acre feet.
4/ Total available timber is 576 MCF (2880 MBF).

Table 4. List of Recreation Site Construction Needs in Priority Order

Site	PAOT 1/ Capacity	Affected Acres	Miles of Road Road/Trail Construction/ Reconstruction	Ranger District
Reef Campgrounds (2)	150	50	1.2	Sierra Vista
Madera Canyon Trail System	N/A	15	6.0	Nogales
Twilight Campground Water	N/A	30	0	Safford
Twilight Campground	105	30	1.4	Safford
Proctor Road Water System	N/A	40	0	Nogales
Proctor Road Campground	100	40	1.5	Nogales
Madera Entrance Facility	N/A	.5	.2	Nogales
Tanque Verde Parking	N/A	6	0	Santa Catalina
Tanque Verde Trails	N/A	2	0	Santa Catalina
Sunnyside Campground	200	50	2.3	Sierra Vista
East Stronghold Campground	150	50	.1	Douglas
Madera Picnic	50	10	.5	Nogales
Organization Camps (2)	200	50	0.6	Safford (Private funding)
Sabino Bus Stops, etc.	200	5	0	Santa Catalina
Jacobson Picnic Area	60	30	1.3	Safford
Whitetail Picnic Area	150	40	2.0	Santa Catalina
Snowflat-Treasure Park CPG	200	50	3.0	Safford
Long Ridge Campground	200	50	0.5	Sierra Vista
Carr Canyon Picnic Area	250	60	1.5	Sierra Vista
Gardner Campground	400	100	2.5	Nogales
Fort Rucker Picnic Area	50	25	0.1	Douglas
Walker Campground	235	50	2.0	Nogales
Redington Picnic Area	250	50	0.1	Santa Catalina
Chimney Rock Campground	200	50	0.3	Santa Catalina
Broken Arrow Picnic Area	200	50	0.1	Sierra Vista
Riggs Ridge Campground	200	50	0.5	Safford
Italian Trap Campground	200	50	2.5	Santa Catalina
Pajarito Campground	250	50	1.5	Nogales
Old Prison Site Campground	200	30	0.7	Santa Catalina

1/ PAOT - Persons at one time.

Table 5. List of Recreation Reconstruction Needs in Priority Order.

Site	Ranger District
Loma Linda Water System	Santa Catalina
Molino Basin Water System	Santa Catalina
Molino Basin Lower Loop	Sanat Catalina
South Fork Campground	Douglas
Sunny Flats Campground	Douglas
Sycamore Campground	Douglas
Turkey Creek Campground	Douglas
Loma Linda Picnic	Santa Catalina
Inspiration Rock Picnic	Santa Catalina
Hitchcock Campground	Santa Catalina
Arcadia Water System	Safford
Bear Canyon Campground	Safford
Shannon Water System	Safford
Bear Wallow Picnic	Santa Catalina
Bathtub Campground	Douglas
Rucker Campground	Douglas
Peppersauce	Santa Catalina
Whiterock	Nogales
Lakeview	Nogales
East Cochise Stronghold	Douglas
Calabasas Campground	Nogales
Noon Creek Water System	Safford
Wet Canyon Water System	Safford
Bog Springs	Nogales
Sykes Knob Picnic Site	Santa Catalina
Sabino Canyon Recreation Area	Santa Catalina
Bog Springs Campground	Nogales
Bear Canyon Picnic Site	Santa Catalina
Stockton Pass Campground (Roads)	Safford
Rose Canyon Campground (Powerline)	Santa Catalina
Windy Point Vista	Santa Catalina

Table 6. Fire, Aviation, and Other Facility Construction Schedule

	Estimated Dollars by Periods			
	Period 1	Period 2	Period 3	Period 4
Utility System				
Mt. Lemmon Water	350,000	(30% FA&O, 70% Recreation)		
Nogales District Office			100,000 1/	
Sierra Vista District Office		60,000		
Offices				
Nogales District			200,000 1/	
Sierra Vista District		230,000		
Santa Catalina (including Information & Interpretation needs)		100,000		
Douglas District (acquire current leased space)	320,000			
Work Shop				
Nogales District Office			80,000 1/	
Palisades (Remodel)			30,000	
Sabino Canyon			70,000	
Sierra Vista District Office		150,000		
Barns				
Rucker Work Center	25,000			
Sabino Canyon				30,000
Nogales District Office		60,000		

Table 6. Fire, Aviation, and Other Facility Construction Schedule (Continued)

	Estimated Dollars by Periods			
	Period 1	Period 2	Period 3	Period 4
Miscellaneous				
Rucker Flammable Storage	19,000			
Sabino Flammable Storage	10,000			
Palisades Flammable Storage		10,000		
Rucker Helibase	10,000			
Palisades Trailer Park		150,000		

1/ If the current Sierra Vista District Office is acquired through land exchange, the Nogales District Office construction will be moved to Period 2.

Table 7. Right-of-Way Needs Schedule for Period 1
(Represents priority listing by Ranger District)

ROAD OR TRAIL NO.	ROAD OR TRAIL NAME	MILES OF R/W
	Douglas RD	
4236	Fourr Canyon	0.2
4282	Rock Creek	1.25
317	Price Canyon	4.75
63	Geronimo Trail	5.0
4254	Pridham Canyon	1.0
356	East Whitetail	0.5
	Nogales RD	
217	California Gulch-Warsaw	0.3
165	Greaterville	0.3
152	Big Casa Blanca	1.7
	Wood Canyon	2.2
234	Adobe Canyon	1.5
627	Hog Canyon	1.5
684	Puerto Springs-Sardina	2.0
623	Pesquiera Canyon	1.5
4206	Alamo Canyon	0.8
	Sierra Vista RD	
369	French Joe	0.6
778	Mine Canyon	1.3
779	Granite Peak (Rain Valley)	2.0
199	Brown Canyon	0.5
212	J-Six	1.0
4012	Cottonwood	4.0
208	Middle Canyon	0.8
	Safford RD	
673	Lindsey Canyon	2.0
679	Goodwin Wash	17.6
94	Black Rock	17.5
T64	Fisher Basin Trail	2.5
T66	Cottonwood Mountain Trail	1.5
T67	Gardner Canyon Trail	0.4
T284	Cobre Canyon Trail	2.7
T96	Power's Garden	4.0
	Santa Catalina RD	
736	Charouleau Gap	6.0
640	Canada Del Oro	5.0

Table 8. Land Line Program for Period 1
(District priorities given for first 10 or less projects)

Douglas Ranger District

District Priority	Name	Miles	Section	Township	Range
1	Pine Canyon	1.5	10,16,17,18	17S	29E
2	Cloverdale and Clanton	23	(12 Sections)	33S	21W(NM)
3	E. Boundary Middlemarch	1	17	18S	24E
4	Portal	2.0	34	17S	31E
5	Black Diamond	2	22	18S	24E
6	John Long	2	18	19S	29E
7	Rucker	6	21,28,29	19S	29E
8	East Stronghold	1.5	24,25	17S	23E
9	Pinery	8	2,12	17S	29 & 30E
10	Price	3	35,36,1,6	19 & 20S	30 & 31E
	Tex	2	12,13	20S	29E
	Turkey Creek	3	14	18S	29E
	Two Week	4.5	36,2,11	19 & 20S	31E
	Jackwood	1.5	9,10	20S	31E
	Hog Canyon	3	20,28	22S	32E
	Pedregosa	1	6	21S	30E
	Robertson	1	36	32S	21W(NM)

Nogales Ranger District

District Priority	Name	Miles	Section	Township	Range
1	Arivaca	4.0	5,8,18	22S	11E
2	Oro Blanca	2	25,26	22S	10E
3	Yellow Jacket	1.5	10	22S	10E
4	Alto	2	4,5	21S	15E
5	Elephant Head	1.5	28,29	19S	14E
6	Faber	3	13,14,23	19S	14E
7	Box	5	15,16,17	19S	16E
8	Ruby	5	4,5	23S	11E
9	Warsaw (3 M.S's)	3	7,19,20	23S	11E
10	M S 2650	2	15,16	22S	9E
	Jones	2.5	18	22S	10E
	Greaterville	3.2	19	19S	16E
	Casa Blanca	5	6,7,1	21S	15 & 16E
	Gardner	4	2,3	20S	16E

Sierra Vista Ranger District

District Priority	Name	Miles	Section	Township	Range
1	Canelo	24.0	(16 Sections)	22S	18E
2	Parker	5.9	7,8,17,18	23S	19E
3	Ramsey	4.0	9,10	23S	20E
4	Barchas	2.0	34	22S	20E
5	Woodyard	4.1	25,35,36	21S	18E
6	Mowry 1	8.0	13,14,15,23	23S	16E
7	Harshaw Loop	10.0	(6 Sections)	22S	16E
8	Harshaw MS	6.0	4,5	23S	16E
9	Mowry 2	12.0	(8 Sections)	23S	17E
10	Aztec	2.7	19,24,25	22S	15 & 16E
	Goldbaum	4.0	1,2	23S	16E
	HES 253 & 261	4.5	26,27	21S	17E
	HES 254	2.5	27,28	21S	17E
	Parker 2	2.8	27,34	21S	17E
	Red Hill	3.0	19,20,30	23S	16E
	Washington Camp	7.0	34,35,2,3,10	23 & 24S	16E

Table 8. Land Line Program for Period 1 (continued)
(District priorities given for first 10 or less projects)

Safford Ranger District

District Priority	Name	Miles	Section	Township	Range
1	HES 172	1	8,17,18	10S	25E
2	Pitchfork	3	3,4	10S	24E
3	Harrison	1	17	10S	21E
4	Fry-Ash	3.5	35,1,7	7 & 8S	24 & 25E
5	Ash	1.5	9,10	11S	21E
6	Deer	1.5	11	9S	20E

Santa Catalina Ranger District

District Priority	Name	Miles	Section	Township	Range
1	Cargodora Canyon (entrance to N.F. land)	1.0	25	11S	14E
2	Summerhaven	4.8	25,36	11S	15E
			30,31	11S	16E
3	Pusch Ridge Wilderness Area	11.0	9,17,19,29, 30,33	12S	14E
4	Rincon Wilderness Area	-	-	-	-
5	Oracle Area	2.5	1	10S	15E
		5.0	5,6	10S	16E
6	Sabino Canyon to area South of Redington Rd.	13.0	10,11,12	13S	15E
			7,8,9,16,21 26,27,28,36	13S	16E
7	American Flag Ranch Headquarters	3.0	16,21	10S	16E
8	Burney Mines	2.0	21,22	10S	15E
9	Catalina State Park (Boundary adjacent to N.F. land)	2.0	35	11S	14E
			2	12S	14E

Table 9. Major Road Reconstruction Schedule

1. General Hitchcock (Mt. Lemmon) Highway FH39 (25 mi.) and Ski Valley Road No. 11 (3.5 mi.). Maintain as a scenic highway but reconstruct on the existing alignment and to the existing standard (two lanes with a 30 mph design speed). Presconstruction and initial construction to be accomplished in time Period 1 and final construction to be completed in time Period 2. Estimated Cost = $15-20,000,000 of Forest Highway Funds through FHWA.

2. Purchase right-of-way and construct and reconstruct those roads necessary to provide public access to the Forest.

3. Construct new roads into unroaded fuelwood areas. Average 2 miles/year at $18,000/mile for last 5 years of first time period and first 5 years of second time period.

4. Chesley Flat (Swift Trail) Road No. 803 (5.8 mi.) will be reconstructed in the first and second periods. Estimated Cost = $348,000.

5. Washington Camp - Montezuma Pass Road No. 61 (34.7 mi.) is included in the Forest Highway system (F436) and will be reconstructed during the second and third time periods. Estimated Cost = 1.4 MM/time period.

6. Ruby Road No. 39 (26.7 mi.) will be reconstructed during the third time period. Estimated Cost = $2,136,000.

7. Nogales Ranger Station Road No. 620 (0.5 mi.) will be reconstructed during the second period. Estimated Cost = $80,000.

8. Montezuma Pass Road No. 48 (5.3 mi.) will be reconstructed during the fourth period. Estimated Cost = $530,000.

9. Onion Saddle Road No. 42 (29.8 mi.) will be reconstructed during the fifth time period. Estimated Cost = $2,384,000.

10. Carr Canyon Road No. 368. Reconstruct and pave 6.1 miles on existing location during first and second periods. Estimated Cost = $920,000.

11. 22.5 miles of recreation roads as shown in Tables - 8 and 9.

12. Redington Road No. 371 (12.2 mi.). The first mile on the west end will be reconstructed during the first period.

13. Construct parking for trail heads.

14. Madera Canyon Roads 70, 70A - Resurface and construct parking pullouts.

Table 10. Trail Construction and Reconstruction Needs [1/]

Bird Canyon to Esperero Canyon This route has been proposed to eliminate the section of the Esperero Trail which traverses a portion of private land in Section 5, T12S, R16E. This reroute would require reconstruction of approximately 1.5 miles of a route frequently used by the Southern Arizona Hiking Club for access to the area.

Linda Vista Trailhead to Catalina State Park This route has been proposed to serve trail users, including horse use, in an area where access across private land is being closed. Development of the trail will depend upon findings of the current bighorn sheep study since there is concern about impacts of human activity on the sheep. Information to assist in making a final decision should be available by July 1985.

Table 10. Trail Construction and Reconstruction Needs [1/] (continued)

Round the Mountain Trail No. 302 Approximately 0.3 miles are needed to connect the existing trail to the new trailhead.

Shake Trail No. 309 Approximately 0.3 miles are needed to connect the existing trail to the new trailhead.

Border Trail Establish location of the historical Border Trail which was used in the survey and monument action of the International Boundary west of Nogales. No actual reconstruction would be done.

Green Mountain Trail No. 21 Approximately 1.0 miles are needed to replace the poorly located trail between Hitchcock Campground and Green Mountain.

Mt. Lemmon Loop Approximately 2.0 miles are needed to replace the Aspen Draw Trail which was eliminated in the Ski Area Expansion.

High Ridge Trail No. 413 Approximately 2.0 miles are needed to complete the trail between the Incinerator Road and the San Pedro Vista that was started by the YACC program.

Tanque Verde Falls Trail No. 342 Approximately 0.2 miles. Construction will depend upon detailed planning for the management of the area to improve safety.

Rose Canyon Lake Loop Trail Approximately 0.4 miles. Complete the trail around Rose Canyon Lake. This may require a catwalk across the dam.

Madera Canyon to Montosa Canyon This ten mile trail will begin at the mouth of Madera Canyon and connect the canyon trail system to Road 184 leading to Whipple Observatory. Grade will be moderate making the trail suitable for hikers, horseback riding, and bicycles.

South Fork (Cave Creek) Trail No. 243 Reconstruct and relocate approximately 2.0 miles of trail damaged by heavy runoff.

Other Trails Short sections on many of the existing trails need to be relocated or reconstructed to bring the trails up to the desired standard.

Heavy Maintenance Drainage installation, brushing, and tread restoration is needed on approximately 490 miles of existing trails. This will be accomplished at the rate of about 30 to 40 miles per year.

1/ Construction, reconstruction, and heavy maintenance will be accomplished through a combination of appropriated funds and volunteer contributions.

Table 11. Land Adjustment Plan

To improve management and benefit the administration of the National Forest, certain private lands within or adjacent to the boundary of the Forest have been classified as desirable for acquisition. Because local and physical conditions may change during the life of this plan, the lands classified in this plan and others that may be considered, will meet one or more of the following criteria.

1. Lands within designated wildernesses.
2. Lands that contain vital threatened and endangered species habitat, or vital wildlife habitat (i.e. lambing areas).
3. Lands needed for developed and dispersed recreation.
4. Wet lands, riparian areas, and other water oriented lands.
5. Lands that contain unique, natural, or cultural values.
6. Lands that will improve public land management, meet specific administrative needs, or benefit other National Forest programs.
7. Lands that provide needed access, or protect public lands from fire, or trespass or prevent damage to public land resources.
8. Lands that need rehabilitation or stabilization to restore their productivity.
9. Lands that are needed to block up public land ownership or meet research needs.
10. Lands that are needed to meet programs prescribed or endorsed by acts, or reports of Congress, or the Department of Agriculture.
11. Acquire inholdings that contain needed rights-of-way and will contribute to the Forest Resource Management Base.

The acquisition program will be achieved through purchase, exchange, and donation authorities. The Purchase Program Centers about the Land and Water Conservation Fund Act that designates that lands within the following categories are eligible for acquisition with L&WCFA funds:

1. Congressionally designated areas.
2. Wilderness.
3. Threatened and endangered species habitat.
4. Recreation acquisition composites and inholdings.

The basic goals of the composite program are to provide:

-- Lands needed for construction of public recreation facilities.
-- Lands needed for dispersed recreation and open space.
-- Protection of public recreation resources.
-- Prevention of private usurpation of public resources and facilities on nearby public land.

The following table shows the approved and proposed L&WCFA composites:

Table 11a. Approved and Proposed Recreation Acquisition Composites [1/]
Coronado National Forest

Composites	Date Approved	Acres Approved as desirable for Acquisition	New Acres Remaining	1980 Est. Cost of Lands (million $)
Madera	2/16/78	15.49	15.49	.5
Santa Catalina	10/17/78	65.27	54.17	.5
Huachuca Mountain	proposed [2/]	2174	2174	2.5
Dragoon Mountain	Proposed [2/]	1463	1463	1.5
Chiricahua Mountain	Proposed [2/]	6387	6387	8.0

[1/] Essentially all of the lands identified for acquisition with L&WCFA Funds are also eligible for acquisition by exchange or donations, and will be acquired by these authorities when the opportunity arises and when appropriate.

[2/] This PAC has been reviewed by the Regional Office and personnel of the U.S. Department of Interior.

The Donation authorities are applicable for any of the lands that meet the Acquisition criteria.

The Land Exchange Program operates under several authorities and is the major land adjustment program that can be employed to acquire essentially all of the lands that meet the acquisition criteria. The lands offered by the United States in a land exchange are tentatively classified as base-in exchange. Because local and physical conditions may change during the life of this plan, those lands classified in this plan and any other that may be considered will generally meet one or more of the following criteria:

1. Lands needed to meet the needs of expanding communities.
2. Isolated tracts or scattered parcels that cannot be efficiently managed.
3. Provide consolidation of the Public lands.
4. To improve management, benefit specific resources, or increase management efficiency.
5. To meet overriding public needs.

Table 12. Wildlife Habitat Improvement Projects by Period

Alternative/Practice	Unit	Planning Period 1	2	3	4	5
		(Totals for Period)				
Game and Nongame						
Prescribed burning	thousand acres	27	27	27	27	27
Waters	number	10	10	10	10	10
Meadow maintenance or Aspen regeneration	acres	300	200	100	100	100
Fencing (if appropriate)	miles	30	20	20	0	0
Acquire access	miles of road	8	8	8	8	8
Brush piles (KV)	number of piles	80	80	80	80	80
Seeding (KV)	acres	500	500	500	500	500
Opening (KV)	acres	100	100	100	100	100
Waters (KV)	number	15	15	15	15	15
Prescribed burning (KV)	thousand acres	7.2	7.2	7.2	7.2	7.2
T&E Species (including KV)						
Transplant	thousand acres	1.6	1.6	1.6	1.6	1.6
Structures	number	3	3	3	3	3

Table 13. Structural and Nonstructural Range Improvements by Period

Improvement Type	Unit Measure	Period 1	2	3	4	5
		(Totals for Period)				
Period 1						
Structural						
Fences	miles	55	55	55	30	30
Waters	each	120	120	120	25	20
Nonstructural						
Plant modification	thousand acres	0	4	4	4	3
Grass Seeding	thousand acres	0	2	2	2	2

Table 14. Average Annual Sawtimber Offering [1/]

	Period 1		
Sale Area	Harvest Type	Acres	Volume MBF
Pinaleno Mountains	Intermediate	97	160
Pinaleno Mountains	Shelterwood	25	40
Santa Catalina Mountains	Intermediate	87	140
Santa Catalina Mountains	Shelterwood	22	35
Chiricahua Mountains	Intermediate	80	80
		311	455

[1/] These figures represent the average annual volume offered for ten years. The actual amount offered in any given year could vary depending upon other resource objectives for that year.

Emphasis to complete stand examinations will be paramount and will be completed during Period 1. The amounts of timber listed may be harvested selling fuelwood to meet the target. All sales, if not bid, may be utilized as fuelwood.

Table 15. Summary of Vegetative Management Practices

Management Practice	Vegetative Type	Average Annual Acres Period 1	Period 2	Rationale
Intermediate Cut	Ponderosa Pine Mixed Conifer Spruce Fir	264	264	Intermediate cuts include all the cutting treatments made following establishment of the new stand until the time to replace it. Cuttings are made when needed to increase the vigor of stands and to salvage material which would be lost. They are also used to improve wildlife habitat and visual resources.
Seed Cut	Ponderosa Pine Mixed Conifer Spruce Fir	44	44	Seed cuts are harvest of mature trees in a Shelterwood Silviculture System to open the stand and the site for regeneration from the seed trees left for that purpose. The shelterwood System is the most appropriate harvest method for the Coronado N.F. Ponderosa Pine is classified as a shade-intolerant species, however, some shade is beneficial because it improves soil moisture. In addition the majority of stands are even-aged due to wildfire and past cutting practices. See Southwest Regional Guide for additional information.
Final Removal	Ponderosa Pine Mixed Conifer Spruce Fir	3	3	Final step of regenerating a stand of trees by removing all of the overstory to release the regenerated understory.

Table 15. Summary of Vegetative Management Practices (Continued)

Management Practice	Vegetative Type	Average Annual Acres Period 1	Period 2	Rationale
				Used where an understory is present because species respond well to this method and logging damage to the regenerated stand is minimized.
Timber Stand Improvement (Pre-commercial thinning)	Ponderosa Pine Mixed Conifer	48	48	Method is used to achieve optimum growing stock levels for maximum growth. Practice is used because species respond by accelerating growth. Stagnation is prevented and mortality caused by reduced vigor is decreased.
Intermediate Cut	Oak-Juniper/ Pinon Woodlands	625	625	Practice is employed in the oak and juniper woodlands to create openings for wildlife habitat diversity, to improve wildlife and livestock forage and to provide firewood.
Brush Management	Oak-pinyon-juniper Chaparral, Semi-desert grassland	2000	2000	Management practice is by prescribed fire, mechanical and/or chemical methods depending upon species treated, soil stability, and cost effectiveness. Seeding, if practiced, is accomplished with species appropriate to the site. Basic purpose of the management practice is for enhancement of forage and browse production for both wildlife and domestic livestock and to sustain vegetative diversity. Prescribed burning will be used where plant density and ground cover are sufficient to carry fire hot enough to effectively reduce the brush cover. Chemical control will be used on areas where burning will not be effective or on species where burning promotes resprouting. Mechanical means will be used where neither chemical or burning is effective. Mesquite, pinon, oak, and juniper will be offered as fuelwood before other control practices are considered when material is large enough for fuelwood. See Appendix C for a detailed decision matrix for individual species by management area.
Planting	Riparian	5	10	Planting of riparian species will be done to improve wildlife habitat. Acreage could vary since this practice will be utilized only where natural regeneration does not occur.
Clearcut (Aspen Management)	Mixed Conifer and Aspen	4*	4*	Cuts to create or maintain aspen stands for wildlife and visual resource management. * This will be done once each period in stands of 40 acres or less.

MANAGEMENT AREAS AND PRESCRIPTIONS

The mission, goals and objectives for the Coronado National Forest are attained through applying groups of management practices and activities to specific units of land. The groups of management practices and activities are called "prescriptions" and the land units are called "management areas". This portion of the Plan describes the prescriptions, the management areas, and the linkage between them.

A prescription is defined as "management practices selected and scheduled for application on a specific area to attain multiple use and other goals and objectives". (36 CFR 219.3 (u)). A management area is a unit of land where a given prescription is to be applied. These areas are outlined on the Management Area Maps, accompanying this Plan. The number displayed within the management area boundary refers to the mapping number contained in this Plan.

All prescriptions developed for this Plan integrate a number of resource and support element activities and will produce a variety of outputs when applied to a management area. Each prescription is broken down into the following categories:

Management Emphasis and Intensity

A brief statement regarding the resource management and direction for the prescription.

Management Area Description

This part gives a general description of the physical, biological, and administrative characteristics of the management area.

Capability Area Types (Analysis Areas)

This section includes a list of all the capability area types where the prescription can be applied. The Coronado National Forest has developed capability area types (CA's) on the basis of "Terrestrial Ecosystems of the Southwest" (1980) with its major components of soil, vegetation, and climate and modifying components of landform, slope, and lithology. The analysis of public issues, concerns, and opportunities was used along with the CAs to determine the analysis areas to be used during the development of alternatives.

The purpose of delineating capability area types is to predict the response of identified land areas to various management activities. The capability area types are homogeneous in climate, slope, land form, and geology. A capability area type can be defined and delineated on maps and can be identified on the ground. Data can be generated by each area for the purpose of estimating the capability to provide goods, services, or resource uses for each prescription.

Capability area types are not necessarily contiguous areas. The total of all areas of the identical type found on the Forest define a single Capability Area type. Each prescription is expected to have the same consequences or to produce the same results when applied to any acre within the capability area type. The Capability Area Type Index in Appendix A is a quick reference.

Management Practices

A management practice (DU) is a grouping of activities for which budgets are prepared and for which a manager makes decisions on the spending level and the scope, direction, or quality of the work to be performed. Individual projects are grouped by practices for use in short-range program planning and in the budget process. An index of management practices (DU) is provided in Appendix B.

Activities

There is a list of resource management activities that are applicable to the management practices. These activities are grouped into resource or support elements and are identified by alpha/numeric code (e.g., A01, B01, etc.). Each activity has a unique code, title and unit of measure for the work performed. An index is provided in Appendix B. A more detailed description of activities can be found in FSH 1309.11 Management Information Handbook.

Resource program elements are defined as major mission-oriented activities that fulfill statutory or executive requirement.

Support program elements encompass the activities necessary to maintain and facilitate outputs of several or all resource elements.

Standards and Guidelines

The standards and guidelines which apply to each activity are listed. The standards and guidelines set forth: (1) the timing and intensity of the planned activities; (2) the specific policies that apply to the activities in each prescription; and (3) the mitigation measures and coordinating requirements needed to protect resources and the environment.

How to Apply the Prescriptions

In applying management practices or activities, District Rangers or Staff locate the practices or activities on management and capability area maps and field check the location to determine the applicable standards and guidelines to be met and the suitability of applying the practices or activities at that specific location. Practices or activities are monitored in accordance with Chapter 6, Monitoring Plan, to insure compliance with costs, outputs, and standards and guidelines.

If proposed practices or activities are not adequately covered by the Plan, an environmental analysis is conducted to evaluate the proposal and alternatives to it, as well as coordinate the selected practices or activities with applicable standards and guidelines for the area. Additional management constraints not covered by the standards and guidelines in the Plan are determined at this time.

If the practices or activities in the Plan are not appropriate for a specific site because of land suitability or other conflicts with standards and guidelines, the planned action is redesigned or relocated. Major unforeseen practices or activities which cannot be changed and which conflict with the Plan may result in an amendment or revision. Amendments or revisions are accomplished by the Forest Supervisor after appropriate public notification (36 CFR 219.10(f)).

Table 16. Summary of Management Area Allocation

Management Area	Net Forest Acres
1	97,772
2	27,234
2A	3,500
3	14,772
3A & 3B	4,165
4	1,128,739
7	41,547
8	3,355
8A	3,645
9	397,545
14	4,240
TOTAL	1,726,514

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST

Management Practices	Activities
Dispersed Recreation O&M (DU 1)	A01
Developed Recreation O&M (DU 5)	A01
Wilderness Management (DU8)	B01

Standards and Guidelines

1. Develop operational plans for all areas that are receiving resource damage because of recreation activities.

2. Determine use capacities and manage to those capacities at less than standard or standard.

3. Integrate recreation planning with other planning through development and use of the Recreation Opportunity Spectrum and education of Forest personnel in its applications.

4. Nominate appropriate trails to the National Recreation Trails System.

5. Protect all caves and their unique values while more specific management direction is being developed. Some caves may require protection by restricting use and admission.

6. The following criteria will be applied to each area of the Forest when considering changes in motorized vehicle use:

   a. Safety of both non-vehicle users and vehicle users.

   b. Minimization of conflicts between vehicle users and non-vehicle users.

   c. Protection of the natural resource base.

7. The standards and guidelines pertaining to travel and use of motor vehicles within the Forest are by area designation as follows: Designations are shown on the ORV map. The signing of areas open or closed to motor vehicle use will be in accordance with standards and guidelines contained in the Regional Guide for the Southwestern Region.

   a. Designation: Closed to all motorized travel.

      Guidelines: Closed to all motorized vehicles at all times, except those uses authorized by law, permits, and orders in connection with resource management and public safety.

   b. Designation: Restricted. Generally closed to all cross-country motorized travel. Roads and trails open to travel are designated.

      Guidelines: Closed to cross-country travel by all motorized vehicles except those uses authorized by law, permits, and orders in connection with resource management and public safety.

      All roads and trails open to motorized travel are signed. Vehicles may pull off roads or trails up to 300 feet for parking or camping.

   c. Designation: Restricted. Generally closed to all cross-country motorized travel. Roads open to travel are designated. All trails are closed to motorized travel.

      Guidelines: Closed to cross-country travel by all motorized vehicles except those uses authorized by laws, permits, and orders in connection with resource management and public safety.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		All roads open to motorized travel are signed. Vehicles may pull off roads or trails up to 300 feet for parking or camping. In Sabino Canyon Recreation Area, private motor vehicles are allowed only in the parking lot. Only administrative, educational, emergency, and shuttle bus vehicular traffic are allowed on the canyon roads. Limits on bicycle use may be required. All trails are closed to motorized travel. A trail is defined as "a way for purposes of travel by foot, stock or trail vehicles, 40 inches wide or less".
Visual Resource Management (DU 2)	A03	1. Continue to maintain and protect the visual integrity of the landscape by meeting or exceeding the established visual quality objectives which range from preservation to maximum modification. This shall be done by providing visual analysis for all management practices to predict visual impacts, recommending methods for meeting visual quality objectives and mitigating visual impacts in accordance with design guidelines in USDA Handbook 478. National Forest Landscape Management, Volume 2 series. Facilities developed to accommodate the viewer will remain visually subordinate to the surrounding landscape. 2. Rehabilitate or enhance the existing visual quality in the process of accomplishing other resource management practices. 3. Evidences of management activities no longer desired will be removed and rehabilitated consistent with designated visual quality objectives. 4. Viewshed corridor plans will be prepared for management activities which fall within viewing areas of major recreational roads and their associated recreation areas. These plans will identify key visual elements of the viewshed and coordinate the activities to promote diversity and the desired visual character over time. 5. Inventory the Existing Visual Condition (EVC) and the Visual Absorption Capability (VAC) of the landscape.
Cultural Resource Management (DU 3)	A02	1. The Forest will comply with the National Historic Preservation Act (NHPA) and with Executive Order (EO) 11593, and will undertake active management which recognizes cultural resources as equal in importance to other multiple uses. Cultural resources will be managed in coordination with the State Historic Preservation Plan and planning activities of the State Historic Preservation Officer and State Archaeologist, and in accordance with the negotiated settlement to the Save the Jemez et al./State of New Mexico vs. Forest Service litigation. 2. Surface disturbing projects will be managed to comply with 36 CFR 800 and the settlement to the Save the Jemez et al./State of New Mexico vs. Forest Service litigation. All consultation responsibilities with the State Historic Preservation Officer will be followed. The area of the undertaking's potential environmental impact will be inventoried for cultural resources and areas of Native

Management Practices Activities

Standards and Guidelines

American religious use. Inventory standards will be as specified in the settlement document and Forest Service guidelines, and will be determined in consultation with the State Historic Preservation Officer. Native American groups will be consulted as appropriate.

3. During the conduct of undertakings, the preferred management of sites listed in, nominated to, eligible for, or potentially eligible for the National Register is avoidance and protection. Unevaluated sites will be managed as if eligible, unless consultation with the State Historic Preservation Officer indicates otherwise. Management will attempt to achieve a "No Effect" determination in undertakings. When this is not feasible, a "No Adverse Effect" determination will be the preferred standard. This may include cases where consultation with the SHPO indicates that data recovery and interpretation are appropriate. The procedures in 36 CFR 800 will be followed in reaching a management decision.

4. The interaction between cultural and other resources for any specific undertaking will be evaluated in project-level analyses. Where resource management conflicts occur, the desirability of in-place preservation of cultural resources will be weighed against the values of the proposed land use. Preservation of cultural resources in place will become increasingly important under the following conditions:

   - where present methods of investigation and data recovery cannot realize the current research potential of the sites;
   - where the sites are likely to have greater importance for addressing future research questions than current ones;
   - where the cultural values derive primarily from qualities other than research potential, and where those values are fully realized only when the cultural remains exist undisturbed in their original context(s) (e.g., association with significant historical persons or events, special ethnic or religious values, or unique interpretive values);
   - where cultural resources are important primarily for the quality of their architecture and the integrity of their setting;
   - where preservation in place is necessary to accomplish the objectives of the State Historic Preservation Plan;
   - where site density would make data recovery economically infeasible, or require unattainable operating conditions.

5. A cultural resources overview will be completed for the Forest in 1987. The overview will be updated as necessary based on new scientific data and the management situation.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines

6. A cultural resources management assessment will be prepared, in consultation with the State Historic Preservation Officer (SHPO) by April 1, 1988. The assessment will include:

   - discussion of the cultural resources overview;
   - identification of areas requiring more inventory;
   - provision for the identification, classification, and evaluation of known and predicted cultural resources;
   - compilation of a listing of sites having priority for evaluation and nomination to the National Register of Historic Places;
   - determination of maintenance needs for sites listed on or determined eligible for the National Register of Historic Places;
   - development of a prioritized list of sites needing stabilization;
   - provisions for protection of significant sites from vandalism or natural deterioration;
   - identification of opportunities for interpretation of cultural resources;
   - consideration of interactions among cultural and other resources, and opportunities for coordination with the SHPO and other state and federal agencies.

7. The Forest will participate with other forests in development of a cultural resources allocation process to assign sites to appropriate management categories. In consultation with the State Historic Preservation Officer, cultural resources will be allocated to management categories.

8. The Forest will nominate to the National Register at least two sites per year for each full-time professional archaeologist employed in the Forest cultural resources management program, or one thematic or multiple property nomination per year. Sites determined eligible for the National Register will be inspected periodically unless previous data recovery is considered complete. Sites listed on the National Register will be inspected at least biennially.

9. Top priority sites for stabilization/maintenance are the Marijilda Site, Rucker Historic Site, and the Dragoon Springs Stage Stop. Sites listed on the National Register which do not need maintenance at this time are the American Flag Post Office, the Yaqui Springs sites (Coronado National Memorial), and the Powers Cabin in the Galiuro Mountains. The State Historic Preservation Officer and the Advisory Council on Historic Preservation Officer will be consulted in developing and evaluating a proposal to allow the Powers Cabin in the Galiuro Wilderness to deteriorate naturally. The procedures in 36 CFR 800 will be followed in reaching a final decision.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		10. A cultural resources professional will inspect each site that may be affected by an undertaking, and each undertaking with the potential to affect cultural resources. At least 20 percent of the sites designated for protection within each undertaking, including all National Register and eligible properties, will be inspected by a cultural resources specialist, sale administrator, contracting officer's representative, or project inspector. If damage to a cultural resource is discovered, the procedures in the settlement to the Save the Jemez et al./State of New Mexico vs. Forest Service litigation will be followed.
		11. Appropriate measures will be developed to protect cultural resources from deterioration due to natural forces, visitor use, and vandalism. Protective measures may include, signing, fencing, administrative closure, patrolling, interpretive signs, and stabilization or data recovery. Contracts, permits, and leases which have the potential to affect cultural resources will include appropriate clauses on protection responsibilities and liability for damage.
		12. Interpretive opportunities will be pursued. On-site interpretation is planned at the Pima Canyon site in conjunction with trailhead development and at the Reef Historic Site as part of campground development. Other specific interpretive opportunities include interpretive signs at early historic sites along the Swift Trail in the Pinaleno Mountains, and interpretive information regarding early mining sites on the Sierra Vista Ranger District. Additional opportunities involve lectures, tours, professional reports and publications, brochures, displays, trails, and signs.
Wildlife and Fish O&M (DU 10)	C01, C12 C02	1. Maintain or improve occupied habitat of commonly hunted species, listed threatened and endangered species, and management indicator species through mitigation of Forest activities with cooperation of New Mexico Department of Game and Fish, Arizona Game and Fish Department, and US Fish and Wildlife Service. Where applicable consult with other wildlife and plant oriented groups and affected agencies. (See Appendix H for minimum desired habitat acres).
		2. Coordinate where needed, animal damage and plant control on Forest Service administered lands with the US Fish and Wildlife Service and state wildlife and plant agencies.
		3. Maintain or improve current vegetative diversity (numbers of plant associations and species occurrence) by mitigation of Forest activities. (See Appendix H for desired acres).
		4. With cooperation of federal, Arizona and New Mexico wildlife agencies, develop overall direction for listed threatened and endangered species. (See Appendix G for species list.) Delist federally and state listed threatened and endangered species in accordance with species recovery plans. Reoccupy historical habitat Forest-wide with other identified species.
		5. Reintroduce extirpated native species into historical habitats in accordance with cooperative interagency plans.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		6. Consult with the New Mexico Department of Game and Fish, New Mexico Department of Natural Resources, Arizona Game and Fish Department, and U.S. Fish and Wildlife Service during the environmental analysis process on projects significantly affecting wildlife and threatened and endangered plant habitats. Specific agency responsibilities are described in FSM 2610 (Wildlife and Fish Cooperative Relations) and 2670 (Threatened and Endangered Plants and Animals) and in the Endangered Species Act. Where applicable consult with other wildlife and plant oriented groups (such as State Heritage Programs) and affected federal agencies.
		7. Determine presence of federally and state listed threatened and endangered plant and animal species in project areas through on-site inventory and consultation with existing data bases as part of environmental analysis completion. Recommendations for habitat needs will be made on a project by project basis.
		8. In cooperation with the U.S. Fish and Wildlife Service, Arizona Game and Fish Department, and New Mexico Department of Game and Fish develop a general activity plan for state and federally listed threatened and endangered species. This directional plan would guide habitat management on the Coronado National Forest by: (1) determining critical habitat for threatened and endangered species and prescribing measures to prevent the destruction or adverse modification of such habitat; (2) recommending appropriate conservation measures including the designation of special areas to meet the protection and management needs of such species; (3) prioritizing completion of recovery plans on memorandums of understanding by species; and (4) establishing a time frame for (3) above. Habitat requirements, research needs, and transplant goals with completion dates would be outlined for each species within its recovery plan. (See Appendix G for species list).
		9. Develop management plans for designated endangered species critical habitat on site by site basis as species recovery plans are completed.
		10. In cooperation with Arizona and New Mexico wildlife agencies develop an activity plan for transplanting other native species into historically occupied habitat. This directional plan would guide habitat management on the Coronado National Forest by: (1) prioritizing relocation sites Forest-wide by species; (2) developing habitat management plans and memorandum of understanding for relocation sites; and (3) establishing a schedule for completion of (1) and (2) above.
		11. Evaluate through consultation with Arizona Game and Fish, New Mexico Departments of Game & Fish and Natural Resources, along with other wildlife and plant-oriented groups where appropriate, population viability of Management Indicator Species through determination of: (1) amount of suitable habitat; (2) distribution of suitable habitat; (3) number of individuals that support regional population goals; and (4) likelihood of continued existence.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines

12. Mitigate impacts on wildlife and plant diversity by applying the following standards and guidelines to the appropriate management activities. Wildlife species to be featured are shown for each individual management area.

a. Mineral entry and oil and gas exploration

(1) Leave buffers around watering and feeding areas for escape and hiding cover. Buffer widths vary with the site but must be wide enough to screen affected wildlife from the project site.

(2) Rehabilitate site after entry using mixture of forage and cover plant species.

(3) Within occupied habitat of threatened and endangered species.

(a) Specific recommendations made on site by site basis. Recommendations vary from seasonal limitations to no construction permitted or mineral withdrawal.

b. Recreation

(1) Trails

(a) New Construction

1. Leave one mile buffer around peregrine falcon eyrie locations and other critical raptor nesting sites.

2. Route around rock talus slopes.

(b) Maintenance of existing trails.

1. Minimum maintenance within one mile of peregrine falcon eyrie location.

2. Limit maintenance to between October 1 and February 1 within one mile of peregrine falcon.

(2) Recreation Use

(a) Establish species tolerance levels on a project site by site basis.

c. Fuelwood harvest

(1) Retain 20 percent or more of the stand in mature or overmature age classes as an old growth component. Old growth is defined as a stand of timber or woodland species that is past full maturity and well into old age. The last stage in forest succession.

(a) Retention will emphasize hiding, escape, bedding and thermal cover around feeding and watering areas, in drainages, and along roads. Leave strips vary in size from 50 to 200 feet depending on density by existing vegetation.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		(b) Retention will emphasize leaving mast and berry producing trees in the same mixtures of mature and overmature species as in pretreatment stand.
		(2) Manage other tree age classes as follows: Poles: greater than or equal to 20% of the stand. Sapling and seedling: less than or equal to 60% of the stand.
		(3) Maintain 3 or more cavity bearing live trees and 3 or more snags or decadent trees per acre. Tree diameters at breast height will be at least 12 inches through rotation period, where feasible.
		(4) Meander cutting block boundaries following natural lines for greater edge effect.
		(5) In fuelwood stands yielding less than 4 cords per acre at end of rotation, leave 50% of trees with diameter breast heights less than 4 inches for thermal, hiding and escape cover and as growing stock.
		(6) Retain all age classes of riparian species (defined in FSM 2526, Riparian Watershed Management) and madrone.
		(7) Control livestock and recreation use in stands for two growing seasons or more after harvest to establish vegetative regeneration.
		(8) Retain two turkey roosts per square mile. A roost will include at least 7 trees with 12 inch diameters and 30 foot heights or greater within one half mile of water.
		(9) Leave at least two slash piles as cover or nest sites within one half mile of water. In turkey and Mearn's quail habitats, lop and scatter the slash.
		(10) Retain 150 foot vegetation buffers around raptor nests and colonial turkey vulture and owl roost sites.
		(11) In high density Mearns' quail habitat, leave 15 acres of uncut tree stands interspersed with openings less than 150 feet in width. Utilization of forage by livestock will not exceed 45% by weight. In lower density habitat follow guidelines (1), (2), (4), (5), (6), and (7) above.
		(12) In identified threatened and endangered species habitat, the above standards and guidelines will be modified, if necessary, on a site by site basis.
	d. Roads	(1) Limit density of existing and new road construction to one mile of road or less per square mile.

Management Practices Activities — Standards and Guidelines

(2) Close and reseed temporary fuelwood roads after harvest.

(3) Establish tolerance levels for state and federally listed threatened and endangered species for new construction and maintenance of roads on project by project basis.

e. Range Management

(1) Provide wildlife input into allotment management plans in order to:

(a) Maintain wildlife and livestock utilization of perennial vegetation at levels established in FSM 2209.21, R-3 (Range Analysis and Management Handbook).

(b) Provide for one water per section available to wildlife yearlong.

(c) Provide for wildlife escape ramps in water developments.

(d) Allow for wildlife passage through fences by:

1. Building fences with 4 wires or less with bottom wire 16 inches off ground, top wire 12 inches above second wire, and fence height less than or equal to 42 inches.

2. Providing crossings at established antelope travel routes.

f. Range and watershed rehabilitation projects

(1) Leave strips of existing vegetation in drainages and around waters. Width varies with density of existing vegetation but adequate hiding, escape, bedding and thermal cover is usually provided with strips of 50 to 150 feet wide.

(2) Construct 2 slash piles within one half mile of water. In turkey and Mearn's quail habitats, lop and scatter the slash.

(3) Retain all non-targeted plant species, (such as cacti and agaves) within limits of treatment method.

(4) Include plant species for wildlife in reseeding mixture.

g. Other forest products harvest

(1) Beargrass

(a) Harvest areas less than 6 acres when removing 100% of plants.

(b) Reentry at least 2 years after initial treatment.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		(c) Selectively harvest only one out of three plants in drainages.
		(d) No harvest during Merriam's and Gould's turkey nesting and brooding periods in occupied turkey habitats.
		(2) Yucca, cactus, ocotillo, etc.
		(a) Harvest permitted on site by site basis.
	h. Timber harvest	
		(1) Maintain basal area and age class distributions as shown in silvicultural guidelines for timber harvest in Management Area 2.
		(2) Retain current acres of meadows
		(a) Route timber haul roads around meadows
		(b) Restrict off-road vehicle use to designated roads.
		(c) Leave 50 to 150 feet buffers around meadows to provide thermal, escape and hiding cover.
		(3) Leave 3 or more snags of at least 20 inches diameter breast height per acre through rotation period.
		(4) Meander harvest block boundaries to create greater edge effect.
		(5) Retain all ages classes of riparian species (defined in FSM 2526. Riparian Watershed Management) and madrone.
		(6) Control livestock and recreation use in stands for 2 or more growing seasons after harvest to allow vegetative regeneration.
		(7) Leave 50 to 150 foot or more vegetation buffers around waters and along roads and drainages to provide thermal, escape, bedding and hiding cover. Width varies with density of existing vegetation.
		(8) Retain 150 foot buffers around raptor nests.
		(9) Manage for two turkey roosts per section over rotation period. Roosts will include at least 7 trees with 20 inch diameter breast heights and 50 foot heights or greater on a one fourth acre area. Roosts sites will have at least a basal area of 120 and be within a one half mile of water.
		(10) In harvest stands lop and scatter slash within one half mile of water.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		(11) Manage aspen as follows: (a) 40% of stand has aspen and conifer basal area greater than or equal to 161; 30% greater than or equal to 81 but less than 160; 30% less than or equal to 80. (b) 20% of canopy cover retained in overmature or mature age classes. (c) leave 3 cavity bearing overmature and mature trees and 3 snags with diameter breast heights greater than 10 inches per acre during the 80 year rotation period. (d) Regeneration areas will be less than 6 acres. (12) Gambels oak (a) Retain 40% of canopy cover (compared to total enclosure) as mature and overmature; less than or equal to 30% as poles; and less than or equal to 30% as seedlings/saplings.
Wildlife Habitat Maintenance (DU 11)	C09, C10	1. Maintain wildlife structures to the following guidelines. They are intended to meet specific wildlife habitat objectives as shown for each Management Area. Structures may not exist in every Management Area. a. Maintain all water developments every 4 years b. Maintain study plots once every 10 years c. Maintain other structures once every 4 years
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C05, C06 C07, C08	The following structural and nonstructural improvement guidelines are intended to meet the specific wildlife habitat objectives as shown for each Management Area. They may not be applicable for every Management Area. Non-structural wildlife improvements a. Prescribe burn feasible areas on a 20 year cycle. b. Seed suitable wildlife forage species as needed in fuelwood and timber areas. c. Transplant listed threatened and endangered and other identified species into suitable habitat following guidelines of species recovery plans and memorandums of understanding. d. Revegetate wildfire areas with wildlife forage, cover and riparian species. Native species should be used when available. e. Thin or patch cut an average of 10 acres of aspen, gambel oak and timber species per year. Structural wildlife improvements a. Construct water developments or potholes to accomplish 1 per section within 4 decades.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		b. Consider structural improvements and maintenance for threatened and endangered species as technology develops.
		c. Construct fish habitat improvement structures as needed for threatened and endangered species.
		d. Fence riparian areas where prescribed by approved allotment management plans. Miles of fence constructed will vary with management plan.
Range Management O&M (DU 16)	D01	1. Priority for allotment management planning will be given to areas with opportunity to reverse range deterioration or to increase permitted numbers.
		2. Priority for range improvements goes to allotments with approved plans and where cost effective.
		3. Specific standards and guidelines for livestock grazing operations are those contained in: FSH 2209.21 (Range Analysis Handbook) FSH 2209.22 (Structural Range Improvement Handbook) FSH 2209.23 (Nonstructural Range Improvement Handbook) FSM 2323 (Grazing Management in Wilderness)
		4. Discontinue livestock grazing in Redfield Allotment (Galiuro Mountains) due to economic and ecological reasons.
Timber Management (DU 32)	E00,	1. Coordinate fuelwood programs, to the extent possible, with those on adjacent lands.
		2. Complete fuelwood and Christmas tree inventories.
		3. Timber management priorities are to enhance wildlife and recreation resources.
		4. Fuelwood and other forest products, such as beargrass and manzanita, will be made available to residents of Mexico when not fully utilized by U.S. citizens.
Watershed & Soil Maintenance (DU 34) (DU 36)	F01, F02 F03, F04 254, 255 K01, K03 K04	1. Use waters needed for National Forest programs frugally and efficiently.
		2. First priority for watershed improvement projects goes to unsatisfactory watershed condition.
		3. Complete watershed analyses and watershed restoration action plans.
		4. In all aspects of planning (budget, long range, coordination with other agencies, coordination with other disciplines within the Forest Service and cooperation with research) watershed will be represented. Plans will be sensitive to maintaining or improving watershed conditions.
		5. Through management services, provide information to minimize disturbance and improve already disturbed areas. Best management practices will be used to minimize the time of recovery to a satisfactory erosion level, minimize soil productivity loss, improve water quality and minimize channel damage.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices Activities

Standards and Guidelines

6. Monitor designated projects according to an approved water quality monitoring plan.

7. Restrict equipment use to terrain and climatic conditions where soil damage will be minimal.

8. Manage riparian areas in accordance with legal requirements regarding floodplains, wetlands, wild and scenic rivers, and cultural and other resources. Recognize the importance and distinct values of riparian areas in Forest Plans.

9. Manage riparian areas to protect the productivity and diversity of riparian-dependent resources by requiring actions within or affecting riparian areas to protect and, where applicable, improve dependent resources (FSM 2526). Emphasize protection of soil, water, vegetation, and wildlife and fish resources prior to implementing projects (FSM 2526).

10. Give preferential consideration to resources dependent on riparian areas over other resources. Other resource uses and activities may occur to the extent that they support or do not adversely affect riparian-dependent resources.

11. By the end of the first time period, complete classifications and inventories of all riparian areas, and complete action plans to improve all unsatisfactory riparian areas. Improve all riparian areas to satisfactory or better condition by the end of Period 5. Such satisfactory conditions are specified below, expressed as a percentage of "natural" conditions (that is, what each site can produce if not further disturbed by man). Twenty-five percent of all riparian areas must be in satisfactory condition by Period 2.

    a. Aquatic resource:

        (1) Maintain at least 80 percent of natural shade over water surfaces in fish bearing streams.

        (2) Maintain at least 80 percent of natural bank protection.

        (3) Maintain the composition of sand, silt, and clay within 20 percent of natural levels in fish bearing streams.

    b. Vegetation resource (where the site is capable of supporting woody plants):

        (1) Maintain at least 60 percent of the woody plant composition in three or more riparian species.

        (2) Maintain at least three age classes of riparian woody plants, with at least 10 percent of the woody plant cover in sprouts, seedlings, and saplings of riparian species.

        (3) Maintain at least 60 percent of natural shrub and tree crown cover.

    c. Wildlife resources: Maintain at least 60 percent of natural shade over land surfaces.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities		Standards and Guidelines
		12.	On a site-specific basis, identify riparian-dependent resources and develop action plans and programs to bring about conditions essential to supporting those dependent resources.
Minerals Management (DU 36)	G01, G02 G05, G06	1.	To the extent possible, avoid construction of roads across sensitive soils and scenic lands. Prohibit the construction of roads across mountain meadows.
		2.	Mining and leasing activities will be allowed within the framework of applicable laws and regulations including environmental laws and regulations designed to mitigate the impacts of mining activities. Emphasis should be on gaining cooperation and control through the use of operating plans and bonds for rehabilitation to protect and restore surface resources.
		3.	Exploration and development of common variety minerals for use as aggregate sources must be based on needs identified in transportation plans. Allocation of mineral aggregate will be based on Forest Service needs and the most cost efficient use of various quality aggregates. Forest Service will have priority before personal or commercial use of aggregate materials.
Human Resource Programs (DU 38)	H02, H03 H04, H06 H07	1.	Consider needs of handicapped persons in all new development or redevelopment projects.
		2.	Use volunteers to supplement other resource management activities.
Land Classification (DU 39)	J11, J12	1.	Capitalize on opportunities to consolidate small private land holdings into economically viable units through land ownership adjustment.
		2.	Recognize, in the periodic review of Forest land ownership adjustment planning, the public benefits to be gained and the effect of the planning on land adjacent to the Coronado National Forest.
		3.	Consider all resource values and social needs in doing land adjustment planning.
Land Management Planning (DU 40)	J22	1.	Carry out the intent and direction contained in the Land and Resource Management Planning Regulations and current FSM 1920 manual direction (Land and Resource Management Planning).
Special Use Management (DU 41)	J01, J10	1.	Make rights-of-way wide enough to safely accommodate the use and its future maintenance.
		2.	Require site development and rehabilitation plans for uses; such as, sanitary landfills, dumps, borrow pits, quarries, storage yards and work camps in order to minimize all resource impacts.
		3.	Utility lines will be placed underground when necessary to meet the visual quality objective unless this is not feasible because of overriding environmental concerns, costs and technical considerations. Existing utility lines that do not meet the visual quality objective will be placed underground or realigned when reconstruction becomes necessary.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines

4. Existing utility and transportation corridors will continue to be used for those types of uses. Every attempt should be made to locate new utilities within those existing corridors that meet the visual quality objective. Existing corridors that do not meet the visual quality objective should be relocated when construction becomes necessary. New corridors shall be located so that the visual quality objectives are met.

5. Public access to special use areas will continue so long as it is consistent with safety and the type of use permitted.

6. Land occupancy and use authorizations will be evaluated in light of their effects on the management, protection, development, and utilization of the resources and the long-term public interest in full recognition and response to the requirements and intent of the National Environmental Policy Act.

7. Maintain existing electronic and astrophysical sites and complete site management plans for all sites with cooperation of user groups. Continue to establish user groups or organizations for each site. Consolidation of existing and new facilities and uses shall be given high priority over opening new sites. Group uses according to compatibility.

8. Electronic sites will be managed to the following standards:

   a. Maximize joint use of existing buildings.

   b. Lot plans as presently established will be eliminated. Sites allocated on a total required facility basis.

   c. Maintenance of individual site roads and trails will be carried out jointly through cooperative maintenance proportionate payments to the amount of use or will be maintained by the users.

   d. Clearing of vegetation will be limited to that which poses a hazard to facilities and operational efficiency.

   e. Commercial broadcasting, and constant carriers, will be allowed where compatible. These sites must be separated physically from land mobile and microwave sites.

      Any potential electromagnetic interference must be resolved before construction can proceed. Microwave corridors will be protected.

   f. VHF transmitters will be permitted if frequencies are compatible with those of previous users. (Authorize only specified frequencies and not wide range bands on 2700-10 Technical Data Sheets.)

   g. All new and replacement towers must be self-supporting.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		h. New and replacement antennas and towers will be below the height for which the FAA requires lights because of the interference with the fire lookout tower and aesthetics.
		i. All utility lines will be placed underground.
		j. Any prospective permittee desiring a site shall furnish detailed plans of buildings and antenna support structure to the District Ranger for approval. All towers will meet Electronic Industries Association standard RS-222-C, structural standards for steel antenna towers. These plans will show the relationship of the proposed building and antenna to other facilities in the area, along with manufacturer's specifications for equipment to be used.
		k. All buildings will be colored to blend with the background.
Lands Administration (DU 42)	J04, J05 J10, J12 J13, J15	1. Take actions necessary to determine status of NFS lands and interests in lands.
		2. Update and maintain land status records.
		3. Acquire lands or interest in lands through exchange, purchase or donation in accordance with the Forest Land Adjustment Classification Maps and criteria set forth in Table 11.
		4. Make the following changes in the Forest Land Adjustment Program:
		a. East Whitetail Canyon (Chiricahua Mountains)
		- Reclassify approximately 183 acres of National Forest land as base-for exchange.
		- Reclassify approximately 464 acres of private land from priority 3 for acquisition to undesirable for National Forest purposes.
		b. Holy Cross Area (Santa Catalina Mountains)
		- Reclassify approximately 340 acres of National Forest land as base-for-exchange.
		c. Summerhaven Area (Santa Catalina Mountains)
		- Reclassify approximately 41 acres of private land from priority 1 to priority 3 for acquisition.
		d. North and east side of Santa Rita Mountains. Reclassify approximately 2500 acres of National Forest land as base-for-exchange.
		5. Exchanges should result in an improved forest land ownership pattern.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		6. The exchange of National Forest lands into private ownership should not conflict with county zoning or State and local planning goals.
		7. National Forest land exchanges should foster sound community development. Before exchanges are consummated, it should be determined that the lands being conveyed to private ownership are suitable for their intended use from the standpoint of soils, availability of water, drainage, access, and other physical and environmental factors.
		8. Some areas of high management and operating costs, such as residence areas, do not contribute proportionately to achieving Forest Service goals and objectives. These areas should be carefully evaluated to determine the merits of exchanges. Areas that are costly to administer, have long-term land occupancy commitments, do not contribute significantly to achieving Forest Service goals and objectives, and have minimal benefit to the general public, should be considered as candidate areas for exchange in return for areas of high value multiple resource lands.
		9. Emphasize acquisition of water oriented property inside the National Forest boundary. This property provides much needed high density public recreation use as well as high value wildlife and fish habitat.
		10. Attempt to acquire private land from willing sellers that will provide additional public recreational opportunities including open space. Acquisition will receive low priority Forest-wide.
		11. Review all existing Forest Service withdrawals for following: Recreation Areas Administrative Sites Revocations and All Others
		12. Inventory fixtures (fences, buildings, etc.) which intrude upon or occupy National Forest Service lands, as cases come to light. Resolve cases, by priority, as time and funding permits.
Land Line Location (DU 43)	J06, J07	1. Post legal boundaries between private and National Forest System lands on a priority basis to let the public know where National Forest land is located. Priorities will be selected with emphasis directed toward minimizing future encroachment cases and resolving present encroachments. (See Table 8).
		2. Property lines in environmentally sensitive areas must be visible to be effective. Excessive clearing and painting will be avoided.
		3. On all vegetation and fuel control projects, searches will be made for all land survey corners and bearing trees. Original field notes will be used in these searches.
		4. All fences to be constructed along Forest boundaries will be staked by a land line survey crew.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
Rights-of-Way Acquisition (DU 44)	J18	1. Work closely with the state, counties, and other Federal agencies to resolve rights-of-way problems. Insure public access to the various parts of the Forest on state, county or permanent Forest Service roads. 2. Obtain necessary public access for all permanent roads and trails within the National Forest boundary. 3. Attempt to secure rights-of-way needs as shown by schedules included in Table 7. 4. Interior and boundary fences will have horse or hiker gates located at appropriate places such as trails, major drainages, and major ridgelines.
Transportation System Planning (DU 47 & 50)	L01 L20 L19 L23	1. Recognize pleasure driving as an important aspect of transportation system planning by coordinating circulation systems with the recreation opportunity spectrum. 2. Develop the minimum transportation system to adequately meet management, protection and utilization needs, but in locations that will minimize damage and maximize the values of all resources. 3. New roads or trails needed for resource development and management will be designed and constructed to standards identified in the transportation planning for the concerned area. 4. Road Maintenance activities will be conducted primarily for protection of our road investment, resource protection, user safety, and user economy. Funding will continue to be the primary constraint on the intensity of road maintenance efforts. When roads in need of maintenance cannot be serviced because of budget constraints, they will be closed if unacceptable resource damage is occurring. Maintenance agreements with local government and private organizations will be sought to supplement Forest Service funding. 5. Criteria for determining the appropriate level of trail maintenance are: a. Type of use (e.g. foot, horses, vehicles, or mix) b. Amount of use. c. Significance of trail. (e.g. major access route, leads to dead end, etc.)
Road & Trail Construction & Reconstruction (DU49 &51)	L05, L09 L10, L11 L12, L13 L21, L22	1. Reconstruct major roads based on schedule shown in Table 9. 2. Bring the General Hitchcock Highway to standard, two lane and 30 mph design speed, to improve safety and reduce maintenance costs. Keep the highway as a scenic highway. Maintain to Level 5. Pima County will assume management responsibility once reconstruction is completed. Ensure that reconstruction has minimum impact on unique rock formations, riparian areas, T&E plants, etc. 3. Construct or reconstruct trails based on needs shown in Table 10.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
Facility Construction (DU 52)	L24	1. Construct or reconstruct facilities in accordance with schedule in Table 6.
Facility Maintenance (DU 53)	L25	1. Maintain facilities to the appropriate condition class. See Appendix F for definition of building condition classes.
Dam Administration (DU 54)	L28	1. Inspect dams as per current FSM direction.
General Administration (DU 55)	T02	1. Every attempt will be made to make the public aware of Forest Service management activities. Emphasis shall be placed on those practices that exclude public use such as electronic or astrophysical sites, and those practices not generally understood by the public.
Fire Management (DU 56)	P01, P03 P04, P07 P10, P02 P19, P20 P21, P22 P16, P17 P24, P09 P08	1. Develop the most cost efficient operations for fire management activities depending on the resources, property, and lives to be protected. 2. Keep the level of prevention and presuppression activities commensurate with the increasing risks and hazards. 3. Utilize prescribed fire in wilderness to enhance wilderness values including restoration and maintenance of threatened species habitat and to permit lightning caused fires to more nearly play their natural ecological role within wilderness. Additional planned ignitions will be used to reduce the risk from wildfire, or its consequences, to life and property within wilderness or to resources, life or property outside wilderness. 4. Conduct fire suppression activities in a way to protect watershed and visual resource values. 5. Appropriate fire suppression responses will protect life and property.
Air Quality Management		1. All management practices will be planned so that air quality will meet local, State and Federal standards.
Chemical Management		1. Safeguard water, people, animals, pets, and property in connection with use of pesticides and fire retardants. 2. Conform to Department of Agriculture standards in the use of all pesticides and promote develop ment of acceptable alternatives for the use of pesticides. 3. Chemicals may be used within guidelines approved by other agencies for the following purposes: a. Insecticides and rodenticides in recreation areas and administrative sites. b. Herbicides for aquatic weed control in fishing lakes. Requests normally come from State Game and Fish Departments. c. Insect and disease control on timber and range lands. Proposals for insect control on range lands (i.e. grasshoppers, etc.) normally come from outside agencies.

MANAGEMENT PRESCRIPTION APPLICABLE TO ALL AREAS OF FOREST (Continued)

Management Practices	Activities	Standards and Guidelines
		d. Small research studies from universities or governmental research agencies.
		e. Herbicides to control brush and herbaceous plants along State and Federal highways. Requests normally come from State Highway Departments as part of annual highway maintenance.
		f. Dust control at recreation sites and administrative sites and on roads.
		g. Cyanide leaching as part of mining operations.
		h. Herbicides to control invading plants that reduce herbaceous forage production on rangelands. Not all of the control would be done by use of herbicides. Depending on individual site circumstances, the control might be by mechanical means, prescribed fire, fuelwood harvest, herbicides, or some combination.
Insect & Disease Management	P34	1. All silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe infected trees during intermediate harvests and regeneration harvests.
Law Enforcement (DU 58)	P25, P27	1. Increase and strengthen law enforcement efforts through memoranda of understanding and providing Forest Service law enforcement personnel.
		2. Enforce laws firmly and fairly. Emphasize personal contact and education over issuance of citations.
		3. In all programs, incorporate measures to promote safety.

MANAGEMENT AREA 1

Management Emphasis and Intensity: Manage for visual resources and semi-primitive dispersed recreation opportunities including those related to wildlife. Visual quality objectives will be met.

Management Area Description: Steep, rugged lands that may be very visible from major travel routes. These lands have generally been determined as incapable of or unsuitable for sustained wood harvest and livestock grazing. Slopes are generally greater than 40%. Includes all vegetative types except major riparian areas.

Capability Area Types: 1M, 6M, and 7M. Total acres = 97,772.

Specific Management Prescription

Timber suitability: All acres unsuitable

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Fuels Management	100	100
Brush Management (Wildlife)	250	250

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation O&M (DU 1)	A15 L23	1. Maintain 25% of trails to level 2 and 75% to level 3. See Appendix E for a definition of levels. 2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 3. Emphasize semi-primitive motorized and semi-primitive non-motorized recreation opportunities. When roads are no longer needed, close them in order to create more opportunities for semiprimitive nonmotorized or primitive experiences. 4. Manage dispersed use at a level of 100% reduced service.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 12,710 Acres Retention 13% 51,819 Acres Partial Retention 53% 33,265 Acres Modification 33% 978 Acres Maximum Modification 1%
Wildlife O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for federally listed plant and animal species and work toward delisting. 2. Maintain current levels of occupied habitat for: mule deer white-tailed deer javelina bighorn sheep pronghorn cottontail

MANAGEMENT AREA 1 (continued)

Management Practices	Activities	Standards and Guidelines
		white-sided jackrabbit black bear raptors Merriam's turkey Gould's turkey scaled quail Mearn's quail Gambel's quail waterfowl Baird's sparrow five-stripped sparrow Arizona ridge nosed rattlesnake twin-spotted rattlesnake western massassauga Gila topminnow
Wildlife Habitat Maintenance (DU 11)	C09, C10 C11	1. Maintain wildlife structures based on guidelines shown in the Forest-wide prescription. The objective is to maintain current levels of occupied habitat for: mule deer white-tailed deer javelina bighorn sheep pronghorn cottontail black bear Merriam's turkey scaled quail waterfowl Gila topminnow
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C07, C08 C05, C06	Structural and nonstructural habitat improvement projects will be based on guidelines shown in the Forest-wide prescription. They are intended to meet the following objectives: 1. Improve quality and availability of forage and availability of water for commonly hunted species: mule deer white-tailed deer javelina bighorn sheep pronghorn 2. Maintain horizontal and vertical plant diversity at current level. 3. Delist threatened and endangered species and reoccupy historic habitat with other identified species following guidelines in approved species recovery plans and memorandums of understanding. 4. Maintain and improve current nesting habitat for endangered species as directed by approved recovery plans.
Range Management O&M (DU 16)	D02	1. Manage rangeland at level A (No assigned permitted use for livestock).
Watershed & Soil Maintenance & Improvement	F05 F03, F06 K05	1. Restore to satisfactory watershed condition on an emergency basis watersheds or portions of watersheds when damaged. Watershed treatment is a low priority in this management

MANAGEMENT AREA 1 (Continued)

Management Practices	Activities	Standards and Guidelines
(DU 33, 34) (DU 45, 46)	K04, K06 552, 553	area. Water and soil resources improvement may consist of channel stabilization, and revegetation using native or nonnative species. See Appendix D for appropriate activities.
Lands Administration (DU 42)	J13, J15	1. Attempt to acquire private lands that will "fill in" ownership pattern, resulting in more effective management of National Forest lands.
		2. Act on all exchange offers that appear to be in the public interest.
Road Maintenance (DU 48)	L19	1. Bring existing roads that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for minimum safety, and resource protection. Maintain roads to level 2. See Appendix F for a definition of levels.
		2. Close, drain and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element.
Fire & Fuels Management (DU 56, 57)	P08, P09 P12, P15	1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See Chapter 5 and map for definition and location of zones.
		2. Natural fuel treatment may consist of broadcast burning or wood gathering for fuelwood.
		3. Prescribed fire will be used to reduce fuel hazards, enhance wildlife values, and enhance visual resources.
		4. All projects that include prescribed fire will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.
Insect & Disease Management	P34, P35 P36	1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damages from insects and diseases. Use integrated pest management techniques which are compatible, economical and environmentally acceptable.
		2. Recognize and prevent conditions favorable for insect and disease outbreaks.

MANAGEMENT AREA 2

Management Emphasis and Intensity: Manage for dispersed recreation opportunities. Uses such as electronic sites and observatories will be permitted on special sites. Sawtimber and fuelwood harvest will be done to enhance recreation, visual quality, and wildlife values. Visual quality objectives will be met. Watershed conditions will be maintained or improved.

Management Area Description: Coniferous forest lands that are suitable for a wide variety of recreational and special uses. Slopes generally less than 40%. Includes both suitable and unsuitable timber producing lands. Located in the Chiricahua, Pinaleno, Santa Rita, and Santa Catalina Mountain Ranges.

Capability Area Types: 4M, 9AHM, 9BHM, 9CHM, and 9DHM. Total acres = 27,234.

Specific Management Prescription

Timber suitability:
Suitable for timber harvest = 11,425 acres
All other acres unsuitable

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Timber stand improvement	40	40
Fuels management	83	83
Intermediate cut (conifers)	219	219
Seed Cut	44	44
Final harvest (conifers)	3	3
Clear Cut (Aspen management)	4*	4*

* This will be done once each period in stands of 40 acres or less.

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation O&M (DU 1)	A14, A15 L23	1. Maintain trails to level 3. See Appendix E for a definition of levels. 2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 3. Manage dispersed use at a level of 100% reduced service. 4. Maintain at least the current amount of ROS Class Semiprimitive Nonmotorized (SPNM), acres and limit additional Semiprimitive Motorized (SPM) and Roaded Natural (RN) acres by closing roads which are determined to be unneeded and allowing creation of temporary roads only for resource utilization.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 23,694 Acres Retention 87% 2,996 Acres Partial Retention 11% 272 Acres Modification 1% 272 Acres Maximum Modification 1%
Trail Construction & Reconstruction (DU 4)	L21, L22	1. Construct trail head as follows: Period 3 - Construct trailhead parking lot with two unit vault toilet.

MANAGEMENT AREA 2 (Continued)

Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for federally listed threatened and endangered plants and animals and work toward delisting. 2. Maintain 80% or more of primary and secondary cavity nester habitat in timber, aspen, and Gambel's oak stands. 3. Maintain or improve current levels of occupied habitat for: white-tailed deer black bear Mt. Graham spruce squirrel other squirrel species Merriam's turkey buff-breasted flycatcher raptors Arizona ridge-nosed rattlesnake twin-spotted rattlesnake rock rattlesnake Arizona trout
Wildlife Habitat Maintenance (DU 11) T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C09, C10, C11 C03, C04 C05, C06 C07, C08	Maintenance of structural and nonstructural habitat improvements will be based on guidelines as shown in the Forest-wide prescription. They are intended to meet the following objectives: 1. Maintain and improve occupied habitat for: white-tailed deer black bear Merriam's turkey buff-breasted flycatcher Arizona trout 2. Maintain horizontal and vertical plant diversity. 3. Delist threatened and endangered species and reoccupy historical habitat with other identified species following guidelines of approved recovery plans and memorandums of understanding.
Range Management O&M (DU 16)	D02, D06	1. Manage rangeland at level A (no livestock) or B (some livestock). See Appendix C for definition of range management levels.

Range Management Levels

Level	Acres
A	12,900
B	14,334

Management excludes most livestock grazing except for recreational animals to protect other values or eliminate conflicts with other uses. Livestock grazing may continue where it currently exists without detriment to emphasized resources and uses.

Projected Range Condition

Condition	Acres Period 1	Period 5
Satisfactory	14,334	14,334
Unsatisfactory	12,900	12,900

Range Improvement (DU 17) — D05

1. Range improvements are minimal and constructed only to the extent needed to protect and maintain other resources in the presence of livestock grazing.

Timber Sale Preparation & Administration (DU 19, 21) — E06, E07, 478, 479, E05

TSI-KF (DU 60)

1. Silviculturally manage the tree resource under uneven or even age management as appropriate with emphasis upon recreation, visual quality, wildlife, and watershed. Complete stand examinations of all suitable acres.

2. The removal of timber is based on a 240 year rotation using group selection and small patch shelterwood cuts to feature four age classes plus wildlife openings. The desired age class structure is as follows:

Class	Age	Percent of Total Area
Seedling-sapling (includes openings)	0-60	40
Poles-sawtimber	61-120	20
Mature sawtimber	121-180	20
Old growth sawtimber	181-240	20

Within the 0 to 60 and 61 to 120 year old stands, maximum basal areas should be maintained for thermal cover. Stocking should not be so high as to cause stand stagnation and decreased tree vigor (less than 120BA). In the two older age classes, basal areas should vary so that 25 to 50% of the stands are opened up (40BA) and the other 50 to 75% are dense (up to 120BA).

Existing meadows in the mixed conifer and spruce-fir types are not included in the suitable timber land base. They will be maintained as open meadows. Additional wildlife openings will be created through timber harvest practices. These will normally rotate as part of the harvest cycle.

3. Reduce slash from wood harvest by offering logging residue as fuelwood. Residual slash will be treated within two years.

Watershed & Soil Maintenance & Improvement — F05, F03, F06

(DU 33, 34) — K05, K04

(DU 45, 46) — K06, 552

1. Restore damaged watersheds to a satisfactory watershed condition.

Watershed treatment is a low priority in this management area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See Appendix D for appropriate activities.

2. Manage all programs to eliminate or minimize onsite and downstream water pollution.

3. Provide, to the extent possible, conservation pools and minimum streamflows in authorizing or developing water storage impoundments and diversion projects.

MANAGEMENT AREA 2 (Continued)

Minerals Management (DU 36)	G07	1. Common materials may be removed for the purpose of meeting other management objectives.
Lands Administration (DU 42)	J13, J15	1. Attempt to acquire private lands that will "fill in" ownership pattern, resulting in more effective management of National Forest lands. 2. Act on all exchange offers that appear to be in the public interest.
Road & Trail Maintenance (DU 48, 50)	L19	1. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety, resource protection and user comfort. Maintain 40% of roads to level 3; and 50% to level 4 and 10% to level 5. See Appendix E for a definition of levels. 2. Close, drain and revegetate existing roads and trails that are determined to be unneeded for further use. This should be a cost of the initiating resource element.
Fire & Fuels Management (DU 56, 57)	P08, P09 P11, P12 P14, P15	1. The management area is in fire suppression zone 1 based on resource objectives. See Section 5 for definition of zones. 2. Require 100% slash treatment within cleared right-of-way boundaries. 3. Within foreground distance zones of sensitivity level 1 and 2 (trails, roads, use areas, and water bodies), require 100% treatment of all activity slash. 4. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering. 5. Prescribed fire will be used to reduce fuel hazard and enhance wildlife habitat. 6. All projects that include prescribed fire will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives. 7. Burn logging slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.
Insect & Disease Management	P34, P35 P36	1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damage from insects and diseases. Use integrated pest management techniques which are compatible, economical, and environmentally acceptable. 2. Recognize and prevent conditions favorable for insect and disease outbreaks. 3. Dispose of logging and construction slash prior to next field season or next flight of insects.

MANAGEMENT AREA 2A

Management Emphasis and Intensity: This is an interim prescription which will continue management direction existing in 1981 until the separate analysis of the potential allocation is completed. Manage for dispersed recreation opportunities. Sawtimber and fuelwood harvest will be compatible with the recreation oriented opportunities. Visual quality objectives will be met. Watershed conditions will be maintained or improved. This area will be studied for suitability as an astrophysical area. Approximately 1,000 acres will be studied for wilderness potential.

Management Area Description: Coniferous forest lands that are suitable for a wide variety of recreational and special uses. Slopes generally less than 40%. Includes both suitable and unsuitable timber producing lands. Located in the Pinaleno Mountain Range.

Capability Area Types: 4M, 9CHM, and 9DHM. Total acres = 3,500.

Specific Management Prescription

Timber Suitability:
Suitable for timber harvest = 2,304 acres
All other acres unsuitable

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Timber Stand Improvement	8	8
Fuels Management	17	17
Intermediate Cut (conifers)	45	45

Interim management practices, activities, standards and guidelines for managing this area are the same as those for Management Area 2 with the following exceptions.

Management Practices	Activities	Standards and Guidelines
Range Management	D02	1. Manage rangeland at level A (no livestock). See Appendix C for definition of range management levels. Management excludes livestock grazing except for recreational animals to protect other values or eliminate conflicts with other uses.
Timber Sales Preparation & Administration (DU 19, 21) TSI-KV (DU 60)	E06 E07, 478, 479 E05	1. Silviculturally manage the tree resource under uneven age management with emphasis upon recreation, visual quality, wildlife, and watershed. Complete stand examinations of all suitable acres.
		2. The removal of timber is based on a 120 year rotation using group selection and single tree selection harvest methods. Maximum clearing size is two acres except for aspen stands where the clearing size may be 40 acres. Manage mixed conifer and spruce-fir stands to a growing stock level of 120 square feet.
Land Management Planning	J22	1. Complete analysis of this management area for suitability for astrophysical development.
		2. The selected management prescription resulting from the separate analysis will replace this interim prescription.

MANAGEMENT AREA 3

Management Emphasis and Intensity: Manage for a variety of dispersed recreation opportunities while protecting or maintaining the unique physical, biological and cultural resources. Visual quality objectives will be met. Other activities should maintain or enhance the recreational opportunities. Watershed conditions will be improved or maintained. Cave Creek, outside the South Fork, will be managed with an emphasis on wildlife habitat. Habitat for species shown under standards and guidelines will be maintained or improved primarily through coordination with other resource activities. Wildlife oriented recreation is also an important part of the management for dispersed and developed use in Cave Creek.

Management Area Description: Undeveloped grasslands, woodlands, coniferous forest and riparian areas that have a high attraction to recreationists. Many are near developed recreation sites and are influenced by the presence of these sites, although not developed themselves. Includes all slope ranges. Includes known essential habitats for threatened and endangered plants and animals.

Capability Area Types: 1P, 1HM, 5HM, 6P, 6PH, 6HM, 6M, 7P, 7PH, 7HM, 9BHM, and 11AR. Total acres = 14,772.

Specific Management Prescription

Timber Suitability:
All acres unsuitable

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Fuel Management	2,000	2,000
Brush Management	1,000	1,000
Intermediate Cut (woodlands)	60	60

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation O&M (DU 1)	A14, A15 L23	1. Maintain trails to level 3. See Appendix E for a definition of levels. 2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 3. Maintain current Roaded Natural (RN) recreation opportunities while creating increased Semiprimitive Nonmotorized (SPNM) opportunities when possible by closing roads which are determined to be unneeded. 4. Manage dispersed use at a level of 35% less than standard and 65% standard. 5. Initiate or continue environmental education programs in Sabino, Madera and Cave Creek Canyons.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 8,125 Acres Retention 55% 3,988 Acres Partial Retention 27% 2,659 Acres Modification 18%
Trail Construction & Reconstruction (DU 4)	L21, L22	1. Construct trailhead facility as follows: Period 4 - Construct an unpaved trailhead parking lot with two unit vault toilet as appropriate.

MANAGEMENT AREA 3 (Continued)

Management Practices	Activities	Standards and Guidelines
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for federally listed threatened and endangered plants and animals and work toward delisting. 2. In fuelwood stands maintain 80% or more of occupied habitat (compared to untreated stands) for primary and secondary cavity nesters. In other areas maintain 100% of occupied habitat for these species. 3. As part of allotment management planning complete riparian management plans by the second period. 4. Maintain or improve current levels of occupied habitat for: Apache fox squirrel white-tailed deer mule deer javelina pronghorn cottontail raptors Mearn's quail Merriam's turkey coppery-tailed trogon sulphur-bellied flycatcher beardless flycatcher thick-billed kingbird Bell's vireo blue-throated hummingbird Arizona ridge-nosed rattlesnake Mexican stoneroller Gila topminnow Sonora chub Gila chub Arizona trout
Wildlife Habitat Maintenance (DU 11)	C09, C10 C11	Maintain wildlife structures based on guidelines as shown in the Forest-wide prescription. The objective is to maintain current levels of occupied habitat for species listed above.
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat (DU 15)	C03, C04 C05, C06 C07, C08	Structural and nonstructural habitat improvements will be based on guidelines as shown in the Forest-wide prescription. They are intended to meet the following objectives: 1. Improve quality of forage for: white-tailed deer mule deer pronghorn Merriam's turkey Gould's turkey 2. Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and memorandums of understanding. Also improve federally endangered species habitat following these same guidelines.

MANAGEMENT AREA 3 (Continued)

Range Management O&M (DU 16) — DO2, DO4, DO6

Range Improvement (DU 17) — DO5

1. Manage suitable rangeland at level A (no livestock) level B (some livestock), level C, and level D. See Appendix C for definition of range management levels.

Range Management Levels

Level	Acres
A	716
B	4,840
C	2,395
D	6,821

Management controls livestock numbers so that livestock use is within present grazing capacity. Improvements are constructed to the extent needed to protect and maintain the other resources in presence of grazing. Riparian areas in Cave Creek are grazed only during period November 1 to June 30. No grazing in Madera Canyon and Carr Canyon Reef Area.

Projected Range Condition

Condition	Acres Period 1	Period 5
Satisfactory	14,181	14,180
Unsatisfactory	591	592

Timber Sale Preparation & Administration (DU 19, 21) — E06, E07, 478, 479

1. Silviculturally manage the woodland tree resource under uneven age management with emphasis upon recreation and visual quality. Fuelwood harvest will be limited to those lands which contain fuelwood species having a crown cover of 10% or more.

2. The removal of dead or green trees for wood products will be by individual tree selection or group selection limited to maximum clearing size of two acres. Harvest will be restricted to removal of over-mature, mature, poor form, low vigor or over-crowded trees for the purpose of improving visual quality and improving or maintaining vegetative and wildlife diversity. Fuelwood harvest will be used to meet wildlife objectives. An old-growth component of a minimum average density of 3 to 5 trees per acre will be maintained in immediate foreground zones of sensitivity 1 and 2 areas.

3. Restrict removal of other vegetation, including beargrass, ocotillo, and cactus to salvage operations.

4. Require 100% slash treatment immediately following wood harvest or right-of-way clearing activities. Before disposal, consider the need for firewood to supply recreation needs. Where this work is performed, use methods which will not degrade visual quality.

5. Require trees to be cut as close to ground level as practical. Within foreground distance zones of sensitivity level 1 and 2 areas (roads, trails, use areas, and water bodies), the angle of cut will face away from the direction from which it is potentially viewed.

MANAGEMENT AREA 3 (Continued)

Watershed & Soil Maintenance & Improvement (DU 33, 34) (DU 45, 46)	F05 F03, F06 K05 K04, K06 552	1. Restore damaged watersheds to a satisfactory watershed condition. Watershed treatment is a high priority in this management area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See Appendix D for appropriate activities.
		2. Manage all programs to eliminate or minimize onsite and downstream water pollution.
		3. Remove slash and clearing debris from drainages, as needed, whether perennial or ephemeral, so that it is above the high water line.
		4. Provide, to the extent possible, conservation pools and minimum streamflows in authorizing or developing water storage impoundments and diversion projects.
Minerals Management (DU 36)	G07	1. Common materials may be removed to accomplish other resource objectives.
Special Use Management (DU 41)	J01	1. Require permits for studies involving structures or facilities placed on the Forest or manipulation of surface or plants.
Lands Administration (DU 42)	J13, J15	1. Attempt to acquire private lands that will "fill in" ownership pattern, resulting in more effective management of National Forest lands.
		2. Act on all exchange offers that appear to be in the public interest.
Road Maintenance (DU 48)	L19	1. Bring existing roads that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety, resource protection and user comfort. Maintain 50% of roads to level 3, 30% to level 4, and 20% to level 5. See Appendix E for a definition of levels.
		2. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element.
Fire & Fuels Management (DU 56, 57)	P08, P09 P11, P12 P14, P15	1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See Section 5 for definition of zones.
		2. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering.
		3. Prescribed fire will be used to reduce fuel hazard and to maintain or improve wildlife habitat and watershed conditions.
		4. A project that includes prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.
		5. Burn slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.

MANAGEMENT AREAS 3A AND 3B

Management Emphasis and Intensity: Manage for a variety of developed recreation opportunities while mitigating the impact on the unique physical, biological, and cultural resources. Visual quality objectives will be met. Other activities will maintain or enhance the recreational opportunities. Watershed conditions will be improved or maintained.

Management Area Description: Lands that are suitable and capable of supporting recreational developments. Average slopes less than 15%.

Capability Area Types: 1P, 4M, 6P, 9AHM, 9BHM & 9CHM, 11AR & 12R
Total acres = 4,165

Specific Management Prescription

Management Practices	Activities	Standards and Guidelines
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 2,082 Acres Retention 50% 2,083 Acres Partial Retention 50%
Developed Recreation O&M (DU 5)	A08, A09 A11, A13 A16 L28 L23 L19	1. Maintain existing public recreation sites at current capacities except as noted in DU 6. 2. Maintain existing organization sites. 3. Continue and expand as needed the Sabino Canyon Shuttle System. 4. Recreation residences, with the exception of those on tenure in the Santa Catalina Mountains and Madera Canyon, will be maintained unless and until a determination has been made that the site involved is needed for a higher priority public purpose. New construction, alteration, addition, or substantial repair of cabins will be limited to one story on existing foundations and a loft. Sun decks may be authorized. 5. Maintain trails to level 4. See Appendix E for a definition of levels. 6. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 7. Maintain existing lakes at planned capacities to provide continued fishing opportunities. Allow Sabino Lake in the Sabino Canyon Recreation Area to remain in its present silted-in condition to provide opportunities for wildlife viewing in the invading riparian vegetation. 8. Determine need for continued public commercial services in Madera Canyon. 9. Inspect and maintain existing dams for public safety and recreation opportunities. 10. Manage developed sites at a level of 85% less than standard and 15% standard depending on site needs and time of year. 11. Maintain roads in Sabino Canyon, Pena Blanca Lake, and Rose Canyon to level 5. All other roads will be maintained to level 4. See Appendix F for definition of levels.

Management Practices	Activities	Standards and Guidelines
		12. Encourage private sector development of campgrounds with facilities such as electricity, sewers, and dump stations on private land.
		13. Initiate and continue environmental education program for Cave Creek, Sabino Canyon and Madera Canyon. Emphasize environmental education by considering the following: a. Employing interpreters and educators (volunteer or paid). b. Construction of nature trails. c. Publishing plant and animal guides and visitor etiquette brochures. d. Building environmental displays. e. Conducting visitor programs.
		14. Specific standards and guidelines for the Sabino Canyon Recreation Area are: a. Prohibit hunting, fishing, and trapping in, and the removal of, native animals or plants from the Sabino Canyon Recreation Area. b. Refrain from the introduction of non-native animals or plants into the Sabino Canyon Recreation Area. Through information and education, discourage the public from releasing non-native species in the area. c. Study the feasibility of eliminating all species of non-native fishes from the portion of Sabino Creek within the Sabino Canyon Recreation Area, and reintroducing the native Longfin Dace, (Agosia chrysogaster). d. Encourage research to increase available information concerning the flora and fauna of the Sabino Canyon Recreation Area. Emphasis should be on inventory of species present and evaluation of their status. e. Continue to prohibit camping, pets, and glass containers in the Sabino Canyon Recreation Area. f. Prohibit the possession of, or discharge of a firearm or any other implement capable of taking life, causing injury, or damaging property within the Sabino Canyon Recreation Area, except that unoperable implements may be transported through the area on designated routes.
		15. Continue the year-round operation at the Mt. Lemmon Ski Area. Facilities will be those necessary to directly support the winter and summer operations. Operations will be limited to the current special use permit area.
Recreation Site Construction & Reconstruction (DU 6)	A05, A06	1. Table 5 shows the schedule for rehabilitation or upgrading of existing facilities.
		2. Development of new sites will be in accordance with schedule shown in Table 4.

MANAGEMENT AREAS 3A AND 3B (Continued)

Management Practices	Activities	Standards and Guidelines
Wildlife & Fish O&M (DU10)	C01, C02 C12	1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to maintain and improve current levels of occupied habitat for appropriate indicator species groups and threatened and endangered species.
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C05	Non-structural habitat improvement will be based on guidelines shown in the Forest-wide prescription. The objective is to: 1. Delist threatened and endangered species following guidelines of approved recovery plans and memorandums of understanding.
Range Management O&M (DU 16)	D02	1. Manage suitable rangeland at level A (no assigned capacity for livestock). Some livestock grazing is permitted for the purpose of reducing the fire hazard from grasses. Some sites may be closed to grazing to meet recreation objectives.
Timber Sale Administration (DU 21)	479	1. Wood gathering in recreation sites will be limited to "dead and down" or standing trees that are a safety hazard and only for use in the area. 2. Thin, within visual quality and recreation objectives, to improve fire protection or for site maintenance.
Watershed & Soil Maintenance & Improvement (DU 33, 34) (DU 45, 46)	F05 F03, F06 K05, K06 552	1. Manage all programs to eliminate or minimize onsite and downstream water pollution. 2. Manage all programs to maintain satisfactory watershed conditions. Watershed treatment is a high priority in this management area. See Appendix D for appropriate activities.
Lands Administration (DU 42)	J04	1. Maintain withdrawals of all developed recreation sites and recommend mineral withdrawals for existing sites not already covered. 2. Recommend mineral withdrawals prior to new site construction.
Transportation System Planning (DU 47) (DU 50)	L01 L20	1. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety, resource protection, and user comfort.
Fire Management (DU 56)	P08, P09	1. The management area is in fire suppression zone one based on objectives for resource protection. See Section 5 for a definition of zones.
Insect & Disease Management		1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damages from insects and diseases. Use integrated past management techniques which are compatible, economical, and environmentally acceptable. 2. Recognize and prevent conditions favorable for insect and disease outbreaks.

MANAGEMENT AREA 4

Management Emphasis and Intensity: Manage for a sustained harvest of livestock forage and fuelwood while maintaining and improving game animal habitat. Fully mitigate the impacts on cultural resources and non-game wildlife habitats. Visual quality objectives will be met or exceeded. Dispersed recreation activities may occur except for those that adversely affect the productivity of the land or resources. Watershed and soil conditions will be improved or maintained.

Management Area Description: Lands capable and suitable for fuelwood harvest, livestock grazing, and game habitat management. Average slopes are 0-40%. Includes desert scrub, grassland, chapparal, and woodland vegetative types.

Capability Area Types: 1P, 1HM, 2P, 2PH, 3P, 5H, 5HM, 6P, 6PH, 6HM, 7P, 7PH, and 7HM. Total acres = 1,128,739.

Specific Management Prescription

Timber Suitability: All acres unsuitable

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Brush Management (wildlife & livestock)	750	750
Intermediate Cut (woodlands)	440	440
Fuels Management	2,000	2,000

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation O&M (DU 1)	A14, A15 L23	1. Maintain 25% of trails to level 2 and 75% to level 3. See Appendix E for definition of levels. 2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 3. Maintain existing ROS class composition, except if any existing roads are determined to be unneeded, close them to create more opportunities for semiprimitive nonmotorized or primitive experiences. 4. Manage dispersed use at less than standard.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 135,449 Acres Retention 12% 406,346 Acres Partial Retention 36% 440,208 Acres Modification 39% 146,736 Acres Maximum Modification 13%
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for federally listed plant and animal species and work toward delisting.

Management Practices	Activities	Standards and Guidelines
		2. In fuelwood stands (as compared to an unharvested stand) maintain 80% or more of the occupied high density habitat and 60% to 80% of the low density habitat for Mearn's quail. Maintain 80% or more of the occupied habitat for cavity nesters. Outside fuelwood areas maintain 100% of occupied habitat for quail and cavity nester species.
		3. Maintain current levels of occupied habitat for: mule deer white-tailed deer javelina desert bighorn sheep pronghorn cottontail white-sided jackrabbit black bear raptors Merriam's turkey Gould's turkey scaled quail Gambel's quail waterfowl Baird's sparrow five-stripped sparrow Arizona ridge nosed rattlesnake twin-spotted rattlesnake western massassauga Gila topminnow
Wildlife Habitat Maintenance (DU 11)	C09, C10, C11	1. Maintain wildlife structures based on guidelines shown in the Forest-wide prescription. The objective is to maintain current levels of occupied habitat for: mule deer white-tailed deer javelina desert bighorn sheep pronghorn cottontail black bear Merriam's turkey scaled quail Gambel's quail waterfowl Gila topminnow
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C05, C06 C07, C08	Structural and nonstructural habitat improvement projects will be based on guidelines in the Forest-wide prescription. They are intended to meet the following objectives: 1. Improve quality and availability of forage and availability of water for commonly hunted species. mule deer white-tailed deer javelina desert bighorn sheep pronghorn 2. Maintain horizontal and vertical plant diversity at current levels.

MANAGEMENT AREA 4 (Continued)

Management Practices	Activities	Standards and Guidelines
		3. Delist threatened and endangered species and reoccupy historic habitat with other identified species following guidelines in approved species recovery plans and memorandums of understanding.
		4. Maintain and improve current nesting habitat for endangered species as directed by approved recovery plans.
Range Management O&M (DU 16)	D02, D04 D06	1. Manage suitable rangeland as follows: See Appendix C for definition of range management levels.
Range Improvement (DU 17, 18)	D03, D05	

Range Management Levels

Level	Vegetation Type	Acres
B	Grassland & Chaparral	134,264
C	Grassland	239,599
D	Grassland & Woodland	754,876

Projected Range Condition

Condition	Acres Period 1	Period 5
Satisfactory	932,559	1,072,302
Unsatisfactory	196,180	56,437

2. Develop proper grazing systems to insure renewal of desired vegetative species for livestock forage, big and small game habitat and to improve soil and water resources.

3. Grazing intensity, utilization standards, and kinds and numbers of livestock will vary depending on the particular allotment and will be based on the physiological needs of the forage plants. Attempt to achieve efficient use of full capacity range.

4. Structural and nonstructural improvements should receive high priority in these areas as needed for the desired level of management.

5. Vegetative manipulation will be used for range forage improvement and may consist of such activities as prescribed burning, mechanical removal, wood harvest, use of approved herbicides, livestock grazing, and reseeding of native or non-native species. See Appendix C for activity selection criteria.

Timber Sale Preparation & Administration (DU 19, 21)	E06 E07, 478, 479	1. Silviculturally manage the woodland resource under uneven age management. Fuelwood harvest will be limited to those lands which contain fuelwood species having a crown cover of 10% or more. Manage to sustain an average 40 to 50 year cutting cycle.
TSI - KV (DU 60)	E05	
		2. The removal of dead or green trees for wood products or Christmas trees will be by individual tree selection or group selection limited to maximum clearing size of two acres. Harvest will be restricted to removal of overmature, mature, poor form, low vigor or over-crowded trees

MANAGEMENT AREA 4 (Continued)

Management Practices	Activities	Standards and Guidelines
		for the purpose of maintaining vigorous stands and desired wildlife habitat.
		3. Use fuelwood sales to accomplish other management objectives such as fuel hazard reduction, visual quality enhancement and range management.
		4. Prohibit the removal of saguaro cactus, agave, yucca and ironwood wildings unless it becomes necessary to remove them in order to accommodate a use of higher priority. The harvest of beargrass, ocotillo, and most cactus species will be permitted as long as there is no significant impact on other resources or uses.
Watershed & Soil Maintenance & Improvement (DU 33, 34) (DU 45, 46)	F05 F03, F06 K05, K04 K06, 552	1. Restore damaged watersheds to a satisfactory watershed condition. Watershed treatment is a high priority in this management area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See Appendix D for appropriate activities.
		2. Manage all programs to eliminate or minimize onsite and downstream water pollution.
		3. Provide, to the extent possible, conservation pools and minimum streamflows in authorizing or developing water storage impoundments and diversion projects.
Minerals Management (DU 36)	G07	1. Common materials for personal or commercial use will require a permit. Attempt to locate borrow areas in places that would enhance resources or facilities.
Lands Administration (DU 42)	J13, J15	1. Act on land exchange offers involving Priority 1 lands and the most desirable Priority II lands to the extent possible.
Road & Trail Maintenance (DU 48, 50)	L19 L23	1. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety and resource protection. Maintain 80% of roads to level 2; 15% to level 3; 3% to level 4; and 2% to level 5. See Appendix E for a definition of levels.
		2. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element.
Fire Management (DU 56)	P08, P09	1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See Section 5 for definition of zones.
Fuels Management (DU 57)	P11, P12 P14, P15	1. Reduce slash from fuelwood harvest to a level that is compatible with Forest Service ability to protect the remaining resources.
		2. Within foreground distance zones of sensitivity levels 1 and 2 (trails, roads, use areas, and water bodies) require 100% treatment of all slash and debris.
		3. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering.

MANAGEMENT AREA 4 (Continued)

Management Practices	Activities	Standards and Guidelines
		4. Prescribed fire will be used to reduce fuel hazard, and enhance wildlife habitat and improve range conditions.
		5. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.
		6. Burn fuelwood slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.
Insect & Disease Management	P34, P35 P36	1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damage from insects and disease. Use integrated pest management techniques which are compatible, economical and environmentally acceptable.
		2. Recognize and prevent conditions favorable for insect and disease outbreaks.

MANAGEMENT AREA 7

Due to the blending and sometimes indistinct differences between riparian vegetative types, Management Area 7 has been assigned two distinct prescriptions. The resource manager will have to decide which prescription is appropriate based on the actual ground conditions. Prescription A is intended for capability types 11AR and 12R while Prescription B is intended for capability Types 10R and 11BR.

PRESCRIPTION A

Management Emphasis and Intensity: Manage to perpetuate the unique wildlife or vegetative species. Improve and manage riparian areas (as defined by FSM 2526, Riparian Watershed Management) to benefit riparian dependent resources. Dispersed recreation activities and other uses may be allowed to the extent they do not degrade the unique values. Facilities may be allowed and maintained for the purpose of protecting these resources. Visual quality objectives will be met.

Management Area Description: Undeveloped lands that have been identified as supporting flora and fauna associations that are unique enough to require special management practices. Includes identified riparian ecotypes. Includes deciduous and coniferous forest types. Includes known, essential habitats for threatened and endangered plants and animals.

Capability Area Types: 8M. 9AHM, 9BHM, 11AR, and 12R.
Total acres = 24,423.

Specific Management Prescription

Timber Suitability: All acres unsuitable.
Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Planting (riparian)	5	10
Intermediate cut (woodland)	25	25

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation O&M (DU 1)	A14, A15 L23	1. Maintain trails to level 3. See Appendix E for a definition of levels. 2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 3. Maintain current Roaded Natural (RN) recreation opportunities while creating increased Semiprimitive Nonmotorized (SPNM) opportunities when possible by closing roads which are determined to be unneeded, and creating temporary roads only for resource utilization projects. 4. Manage dispersed use at a level of 75% less than standard and 25% standard.
Visual Resource Management	A03	Manage the following acres at the indicated Visual Quality Objectives: 8,792 Acres Retention 36% 8,060 Acres Partial Retention 33% 6,106 Acres Modification 25% 1,465 Acres Maximum Modification 6%
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

MANAGEMENT AREA 7, PRESCRIPTION A (Continued)

Management Practices	Activities	Standards and Guidelines
		1. Maintain and improve current habitat for federally listed plant and animal species, and work toward delisting. 2. In fuelwood stands maintain 90% or more of occupied habitat (compared to untreated stands) for primary and secondary cavity nesters. In other areas maintain 100% of occupied habitat for these species. 3. As part of allotment management planning, complete riparian management plans by the second period. 4. Maintain or improve current levels of occupied habitat for: Apache fox squirrel white-tailed deer mule deer javelina pronghorn cottontail raptors Mearns' quail Gould's turkey Merriam's turkey coppery-tailed trogon sulphur-bellied flycatcher beardless flycatcher thick-billed kingbird Bell's vireo blue-throated hummingbird Arizona ridge-nosed rattlesnake Mexican stoneroller Gila topminnow Sonora chub Gila chub Arizona trout
Wildlife Habitat Maintenance (DU 11)	C09, C10 C11	1. Maintain wildlife structures based on guidelines shown in the Forest-wide prescription. They are intended to maintain current levels of occupied habitat for species listed above.
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C05, C06 C07, C08	Structural and nonstructural habitat improvements will be based on guidelines as shown in the Forest-wide prescription. They are intended to meet the following objectives: 1. Improve quality and availability of forage and water for: white-tailed deer mule deer pronghorn Merriam's turkey Gould's turkey 2. Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and memorandums of understanding. Also improve habitat for federally listed plants and animals following these same guidelines.
Range Management O&M (DU 16)	D02, D04 D06	1. Manage suitable rangeland at level D. If level D is not achievable, manage at level A (no livestock). See Appendix C for definition of range management levels.

MANAGEMENT AREA 7, PRESCRIPTION A (Continued)

Management Practices	Activities	Standards and Guidelines

Projected Range Conditions

Condition	Acres Period 1	Period 5
Satisfactory	21,736	22,220
Unsatisfactory	2,687	2,203

2. The following criteria will be considered when determining whether livestock should be excluded from riparian areas. Exclusion may be temporary or permanent; seasonal or yearlong.

   a. Satisfactory riparian conditions as described in the Forest-wide prescription can not be achieved or maintained.

   b. There is a need to protect natural or artificial regeneration of riparian species.

   c. There is a need to protect Threatened of Endangered species habitat.

Range Improvements (DU 17)	D05	1. Structural improvements are minimal and constructed only to the extent needed to protect and maintain the unique resources in presence of grazing.
		2. Vegetative manipulation is not used for range improvement.
Timber Sale Preparation & Administration (DU 19, 21)	E06 E07, 478 479	1. Restrict removal of vegetation, such as beargrass, agave, yucca, ocotillo and cactus, to salvage operations and to remove invading species.
		2. Use fuelwood sales to accomplish other management objectives such as hazard reduction, visual quality enhancement, and wildlife habitat improvement. Harvest will be limited to individual tree selection.
Watershed & Soil Maintenance & Improvement (DU 33, 34) (DU 45, 46)	F05 F03, F06 K05, K06 K05, 552	1. Restore damaged watersheds to satisfactory watershed condition. Watershed treatment is a high priority in this management area. Watershed maintenance and improvement may consist of channel stabilization, and revegetation using native or non-native species. See Appendix D for appropriate activities.
		2. Manage all programs to eliminate or minimize onsite and downstream water pollution.
Minerals Management (DU 36)	G07	1. Consider mineral withdrawals as needed to protect essential habitats for threatened and endangered species.
Lands Administration (DU 42)	J04, J13	1. Attempt to acquire private lands that will "fill in" ownership pattern, resulting in more effective management of National Forest lands.
		2. Act on all exchange offers that appear to be in the public interest.
Road & Trail Planning & Maintenance (DU 47, 48)	L01 L19	1. Attempt to avoid these areas with new road and trail development.
		2. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for

MANAGEMENT AREA 7, PRESCRIPTION A (Continued)

Management Practices	Activities	Standards and Guidelines
		the planned use and provides for minimum safety and resource protection. Maintain roads to level 2. See Appendix E for a definition of levels.
		2. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element.
Fire & Fuels Management (DU 56, 57)	P08, P09 P11, P12 P15	1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See Section 5 for definition of zones.
		2. Require 100% treatment of all slash and debris within cleared right-of way boundaries.
		3. Within foreground distance zones of sensitivity level 1 and 2 (trails and road use areas and water bodies) require 100% treatment of all activity slash.
		4. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering.
		5. The prescribed use of fire will be used to reduce fuel hazard and enhance wildlife habitat.
		6. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.
		7. Burn debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.
Insect & Disease Management	P34, P35 P36	1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damages from insects and diseases. Use integrated pest management techniques which are compatible, economical and environmentally acceptable.
		2. Recognize and prevent conditions favorable for insect and disease outbreaks.

MANAGEMENT AREA 7, PRESCRIPTION B

Management Emphasis and Intensity: Manage to perpetuate the unique wildlife or vegetative species while producing livestock forage and fuelwood on a sustained basis. Recreation activities and other uses may occur to the extent they do not degrade the unique values. Visual quality objectives will be met. Facilities may be allowed and maintained for the purpose of protecting these resources.

Management Area Description: Undeveloped lands that have been identified as supporting flora and fauna associations that are unique enough to require special management practices. Includes identified higher ecosystem extensions, such as oak and mesquite bottoms. Includes known, essential habitats for threatened and endangered plants and animals.

Capability Area Types: 10R and 11BR. Total acres = 17,124.

Specific Management Prescription

Timber Suitability: All acres unsuitable.

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Fuels Management	100	100
Intermediate Cut (woodland)	100	100

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation Management (DU 1)	A14, A15 L23	1. Maintain trails to level 3. See Appendix E for a definition of levels. 2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. 3. Maintain current Roaded Natural (RN) recreation opportunities while creating increased Semiprimitive Nonmotorized (SPNM) opportunities when possible by closing roads which are determined to be unneeded, and creating temporary roads only for resource utilization products. 4. Manage dispersed use at a level of 75% less than standard and 25% standard.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 6,165 Acres Retention 36% 5,651 Acres Partial Retention 33% 4,281 Acres Modification 25% 1,027 Acres Maximum Modification 6%
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for federally listed threatened and endangered plants and animals, and work toward delisting.

MANAGEMENT AREA 7, PRESCRIPTION B (Continued)

Management Practices	Activities	Standards and Guidelines
		2. In fuelwood stands (as compared to an unharvested stand) maintain 80% or more of the occupied high density habitat and 60% to 80% of the low density habitat for Mearn's quail. Maintain 80% or more of the occupied habitat for cavity nesters. In other areas maintain 100% of occupied habitat for quail and cavity nester species. 3. Maintain or improve current occupied levels of habitat for: white-tailed deer mule deer javelina pronghorn cottontail raptors Merriam's turkey Gould's turkey coppery-tailed trogon sulphur-bellied flycatcher beardless flycatcher thick-billed kingbird Bell's vireo blue-throated hummingbird Arizona ridge-nosed rattlesnake Mexican stoneroller Gila topminnow Sonora chub Gila chub
Wildlife Habitat Maintenance (DU 11)	C09, C10, C11	1. Maintain wildlife structures based on guidelines shown in the Forest-wide prescription. They are intended to maintain current levels of occupied habitat for species listed above.
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C05, C06 C07, C08	Structural and nonstructural habitat improvements will be based on guidelines as shown in the Forest-wide prescription. They are intended to meet the following objectives: 1. Improve quality and availability of forage and water for: white-tailed deer mule deer pronghorn Merriam's turkey Gould's turkey 2. Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and memorandums of understanding. Also improve habitat for federally listed plants and animals following these same guidelines.
Range Management O&M (DU 16)	D02, D04 D06	1. Manage suitable rangeland at level D. If level D is not achievable, manage at level A (no livestock). See Appendix C for definition of range management levels.
Range Improvement (DU 17, 18)	D03, D05	Management seeks full utilization of forage allocated to livestock. Cost effective management systems and techniques, including fencing and water development, are designed and applied to obtain relatively uniform livestock distribution and use of forage and to maintain plant vigor.

MANAGEMENT AREA 7, PRESCRIPTION B (Continued)

Management Practices	Activities	Standards and Guidelines

Projected Range Condition
Acres

Condition	Period 1	Period 5
Satisfactory	15,412	15,412
Unsatisfactory	1,712	1,712

2. Vegetative manipulation may be used for range improvement and may consist of such activities as prescribed burning, mechanical removal, wood harvest, use of approved herbicides, livestock grazing, and reseeding of native or non-native species. See Appendix D for activity selection criteria.

Timber Sale Preparation & Administration (DU 19, 21)
TSI - KV (DU 60)
Activities: E06, E07, 478, 479, E05

1. Silviculturally manage the woodland tree resource under uneven age management. Fuelwood harvest will be limited to those lands which contain fuelwood species having a crown cover of 10% or more. Manage to sustain an average 40 to 50 year cutting cycle. The removal of dead or green trees for wood products or Christmas trees will be by individual tree selection or group selection limited to maximum clearing size of two acres. Harvest will be restricted to removal of overmature, mature, poor form, low vigor or over-crowded trees for the purpose of maintaining vigorous stands and sustaining the yield of wood products while maintaining the unique values of the area.

2. Use fuelwood sales to accomplish other management objectives such as hazard reduction, visual quality maintenance, range improvement, and wildlife habitat improvement.

3. Prohibit the removal of saguaro cactus, agave, yucca, and ironwood wildings unless it becomes necessary to remove them in order to accommodate a use of higher priority. The harvest of beargrass, ocotillo, and most cactus species will be permitted as long as there is no significant impact of other resources or uses.

Watershed & Soil Maintenance & Improvement (DU 33, 34) (DU 45, 46)
Activities: F05, F03, F06, K05, K04, 552

1. Watershed treatment is a high priority in this management area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See Appendix D for activity selection criteria.

2. Manage all programs to eliminate or minimize onsite and downstream water pollution.

Minerals Management (DU 36)
Activities: G07

1. Common materials for personal or commercial use may be removed by permit or for National Forest management purposes.

Lands Administration (DU 42)
Activities: J04, J13, J15

1. Consider mineral withdrawals as needed to protect essential habitats for federally threatened and endangered species.

2. Attempt to acquire private lands that will "fill in" ownership pattern, resulting in more effective management of National Forest lands.

3. Act on all exchange offers that appear to be in the public interest.

Road Planning & Maintenance (DU 47, 48)
Activities: L01, L19

1. Attempt to avoid these areas with new road development.

MANAGEMENT AREA 7, PRESCRIPTION B (Continued)

Management Practices	Activities	Standards and Guidelines
		2. Bring existing roads that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety, and resource protection. Maintain roads to level 2. See Appendix E for a definition of levels.
		3. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element.
Fire & Fuels Management (DU 56, 57)	P08, P09 P11, P12 P15	1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See Section 5 for definition of zones.
		2. Reduce slash from fuelwood harvest and right-of-way clearing to a level that is compatible with Forest Service ability to protect the remaining resources and still provide needed wildlife habitat.
		3. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering.
		4. Prescribed fire will be used to reduce fuel hazard and maintain or improve wildlife habitat, livestock forage and watershed condition.
		5. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.
		6. Burn fuelwood slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.
Insect & Disease Management	P34, P35 P36	1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damages from insects and diseases. Use integrated pest management techniques which are compatible, economical and environmentally acceptable.
		2. Recognize and prevent conditions favorable for insect and disease outbreaks.

MANAGEMENT AREA 8

Management Emphasis and Intensity: Manage to provide opportunities for nondisruptive research and education. Use restrictions will be imposed as necessary to keep areas in their climax state. There will be no harvest of forest products including fuelwood.

Management Area Description: Includes those lands that have been determined to be suitable for designation as research natural areas. Includes the following areas:

Existing RNA	Acres
Butterfly	1000
Goudy Canyon (part in wilderness)	370
Elgin	290

New RNA Proposal	Acres
Canelo	350

Other	Acres
Research Ranch	1635

The Research Ranch will not be designated as an official research natural area but will be managed under a memorandum of understanding to meet similar objectives except some vegetative manipulation will be allowed for research projects.

Capability Area Types: 6P, 6P/H, 6H/M, 6M, 9CH/M, and 11AR.
Total acres = 3355.

Specific Standards and Guidelines

Timber Suitability: All Acres Unsuitable.

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation O&M (DU 1)	A14, A15 L23	1. Maintain 50% of trails at level 2 and 50% at level 3. See Appendix E for a definition of levels.
		2. Motor vehicles are not permitted in research natural areas. Within the Research Ranch, use of motorized vehicles is permitted only on designated roads and trails. Some trails may be closed to use by motor vehicles for safety reasons, to eliminate conflicting uses or to further protect resources.
		3. Attempt to maintain semiprimitive nonmotorized opportunities that exist within the Research Ranch. If any existing roads are determined to be unneeded, close them to create more opportunities for primitive or semiprimitive nonmotorized experience.
		4. Manage dispersed use at less than standard.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 1,720 Acres Retention 51% 1,635 Acres Partial Retention 49%
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

MANAGEMENT AREA 8 (Continued)

Management Practices	Activities	Standards and Guidelines
		1. Maintain or improve occupied habitat for federally and state listed animals.
		2. Maintain or improve current populations of endangered and threatened plants.
T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C04 C05	Nonstructural habitat improvement projects will be based on guidelines in the Forest-wide prescription. They are intended to meet the following objectives: 1. Delist threatened and endangered species following guidelines of approved recovery plans and memorandums of understanding.
Range Management O&M (DU 16)	D02	1. Manage rangeland at level A (no livestock). Management excludes livestock grazing to protect other values or eliminate conflicts with other uses.
Watershed Maintenance & Improvement (DU 33, 34)	F03, F05	1. Watershed treatment is a low priority in this management area. If treatment is appropriate, activities are described in Appendix D. 2. These areas will be monitored for watershed condition trends as relic areas.
Minerals Management (DU 36)	G07	1. There will be no removal of mineral materials. 2. Maintain withdrawals from mineral entry for all areas. 3. Recommend withdrawals from mineral entry for new areas. 4. No surface occupancy for leasable minerals.
Road Maintenance (DU 48)	L19	1. Bring existing roads that are to be retained on the system to a maintenance standard which is suitable for the planned use and provides for safety and resource protection. Maintain roads to maintenance level 2. See Appendix E for a definition of levels. 2. Close, drain, and revegetate roads that are determined to be unneeded for further use.
Fire Management (DU 56)	P08, P09	1. The management area is divided into fire suppression zones 1 and 2 based on objectives for resource protection and cost of suppression. See Section 5 for definition of zones. 2. Use prescribed fire to reduce risk and to permit lightning to more nearly play its natural role.
Insect & Disease Management		1. Outbreaks of insects or disease will not be controlled, except where there is a clear and imminent danger to timber of other values outside the research natural area.

MANAGEMENT AREA 8A

Management Emphasis and Intensity: Manage for wilderness values and uses while providing opportunities for nondisruptive research and education. Use restrictions will be imposed as necessary to keep areas in their climax state. There will be no harvest of forest products including fuelwood.

Management Area Description: Includes those lands that have been determined to be suitable for both wilderness designation and designation as research natural areas. Includes the following areas:

Existing RNA	Acres
Pole Bridge	460
Santa Catalina (reduced)	890
Goodding	545
Goudy (part is outside wilderness)	190

New RNA Proposal	Acres
Goodding extension	1470
Pole Bridge extension	90

The Santa Catalina RNA will be reduced from 4131 acres to 890 acres. This will give a more manageable size while maintaining viable populations of targeted species.

Pole Bridge RNA is enlarged to include a more representative example of Chihuahua pine. The Goodding RNA is enlarged to include additional examples of Southwestern riparian types.

Capability Area Types: 6H/M, 6M, 9AH/M, and 11AR.
Total acres = 3645

Specific Management Prescription

Timber Suitability: All Acres Unsuitable

Management Practices	Activities	Standards and Guidelines
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 3,645 Acres Preservation 100%
Wilderness Recreation O&M (DU 8)	B02, B03	1. Maintain trails to level 1 and level 3. See Appendix E for a definition of levels. 2. Use of motorized vehicles is prohibited except as approved for emergency or other special needs. 3. Manage wilderness use at less than standard. 4. Maintain existing ROS class composition.
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain or improve occupied habitat for federally and state listed animals. 2. Maintain or improve current populations of endangered and threatened plants.
T&E Plant Habitat Improvement (DU 12)	C03, C04 C05	Nonstructural habitat improvement projects will be based on guidelines in the Forest-wide prescription. They are intended to meet the following objective:

MANAGEMENT AREA 8A (Continued)

Management Practices	Activities		Standards and Guidelines
Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement		1.	Delist threatened and endangered species following guidelines of approved recovery plans and memorandums of understanding.
Range Management O&M (DU 16)	DO2	1.	Manage rangeland at level A (no livestock). Management excludes livestock grazing to protect other values or eliminate conflicts with other uses.
Watershed Maintenance & Improvement (DU 33, 34)	FO3, FO5 KO4	1.	Watershed treatment is a low priority in this management area. If treatment is appropriate, activity selection criteria is described in Appendix D.
		2.	Monitor these areas for watershed condition trends as relic areas.
Minerals Management (DU 36)	GO7	1.	There will be no removal of mineral materials.
		2.	Continue withdrawals from mineral entry for all areas.
		3.	Recommend withdrawals from mineral entry for new areas.
Fire Management (DU 56)	PO8, PO9	1.	The management area is in fire suppression zones one and two based on objectives for resource protection. See Section 5 for definition of zones.
		2.	Use prescribed fire to reduce risk and to permit lightning to more nearly play its natural role.
Insect & Disease Management		1.	Outbreaks of insects or disease will not be controlled, except where there is a clear and imminent danger to timber or other values outside the research natural area.

MANAGEMENT AREA 9

Management Emphasis and Intensity: Manage for wilderness values while providing livestock grazing and providing recreation opportunities that are compatible with maintaining wilderness values and protecting resources. Lightning fires will be managed as prescribed fires in all wilderness areas.

Management Area Description: Includes all vegetative and land form types that have been determined to be suitable for wilderness designation. Includes the following areas:

Existing Wilderness	Acres
Chiricahua (87,700)	87,150 (The other 550 acres are in Pole Bridge RNA)
Pusch Ridge (56,933)	56,043 (The other 890 acres are in Santa Catalina RNA)
Galiuro	76,317
Miller Peak	20,190
Mt. Wrightson	25,260
Pajarita (7,420)	5,405 (The other 2,015 acres are in Goodding RNA)
Rincon Mountain	38,590
Santa Teresa	26,780
New Wilderness Proposal	
Mt. Graham (62,000)	61,810 (The other 190 acres are in Goudy RNA)

Capability Area Types: All. Total acres = 397,545.

Specific Management Prescription

Timber Suitability: All Acres Unsuitable.

Proposed Vegetation Manipulation:

Treatment Type	Average Annual Acres Period 1	Period 2
Fuels Management	100	100

Management Practices	Activities	Standards and Guidelines
Air Resource Management		1. In the original (prior to Arizona Wilderness Bill) Chiricahua and Galiuro Wilderness Areas (Class 1 Areas) maintain high quality visual conditions. The form, line, texture, and color of characteristic landscapes will be clearly distinguishable when viewed as middleground. Also, cultural resources and ecosystems will remain unmodified by air pollutants. Impacts on vegetation, animals, and water quality will be predicted using current modeling techniques. 2. Determine baseline information and the background condition of the air quality related values and specify limits of acceptable change that will affirmatively protect these values in Class I areas.
Visual Resource Management (DU 2)	A03	Manage the following acres at the indicated Visual Quality Objectives: 397,545 Acres Preservation 100%
Wilderness Recreation O&M (DU 8)	B02, B03 L23	1. Maintain trails to following standards: 15% level 1 25% level 2 57% level 3 3% level 4 See Appendix F for definition of levels.

MANAGEMENT AREA 9 (Continued)

Management Practices	Activities	Standards and Guidelines
		3. Use of motorized vehicles is prohibited except as approved for emergency or other special needs.
		4. Maintain existing ROS classification composition, except recognize potential to increase Primitive (P) and Semiprimitive Nonmotorized (SPNM) opportunities by closing adjacent roads which are deemed unnecessary.
		5. Manage wilderness use as follows: Standard - 172,499 acres generally in riparian and coniferous forest types. Less than standard - 225,046 acres generally in other types.
		6. Cooperate with Saguaro National Monument to implement as nearly identical management of the Rincon Wilderness as possible. Develop a joint operation and maintenance plan.
Trail Construction & Reconstruction (DU 9)	L21 & L22	1. Construct new trail heads as follows: (Note: These developments will be in adjacent management areas just outside the wilderness boundary). Period 1 Construct trailhead parking lot and two-unit vault toilet as appropriate. Period 2 Construct trailhead parking lot and two-unit vault toilet as appropriate.
		2. Construct/reconstruct trails in accordance with Table 10 to aid in the distribution of wilderness users.
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for endangered and threatened plants and animals, and work toward delisting. 2. As part of livestock grazing allotment and recreation management planning, complete riparian management plans by second period. 3. Maintain current levels of occupied habitat for: mule deer white-tailed deer javelina bighorn sheep pronghorn cottontail black bear Mt. Graham spruce squirrel Apache fox squirrel Arizona gray squirrel raptors

MANAGEMENT AREA 9 (Continued)

Management Practices	Activities	Standards and Guidelines
		Merriam's turkey Mearn's guail Gambel's quail buff-breasted flycatcher coppery-tailed trogon sulphur-bellied flycatcher N. tyrannulent flycatcher thick-billed kingbird Bell's vireo blue-throated hummingbird twin-spotted rattlesnake Arizona ridge-nosed rattlesnake rock rattlesnake Gila topminnow Arizona trout Mexican stoneroller Sonora chub Gila chub
Wildlife Habitat Maintenance (DU 11) T&E Plant Habitat Improvement (DU 12) Fish Habitat Improvement (DU 13) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C09, C10, C11 C03, C04 C05, C06 C07, C08	Maintenance and improvement activities will be commensurate with the Wilderness Act and guidelines shown in the Forest-wide prescription. They are intended to meet the following objectives: 1. Maintain habitat for: mule deer white-tailed deer javelina pronghorn black bear Merriam's turkey Gould's turkey 2. Improve habitat for: desert bighorn sheep Gila topminnow Sonora chub Gila chub Arizona trout peregrine falcon and other identified species following guidelines of approved species recovery plans and memorandums of understanding. 3. Consider and implement as appropriate, structural improvement for native and game fish habitats.
Range Management O&M (DU 16) Range Improvements (DU 17, 18)	D02, D04 D06 D05	1. Manage suitable rangeland at levels as follows. See Appendix C for definition of range management levels.

Range Management Levels

Level	Acres
A	89,900
B	242,945
C	64,700

MANAGEMENT AREA 9 (Continued)

Management Practices	Activities	Standards and Guidelines

Projected Range Condition
Acres

Condition	Period 1	Period 5
Satisfactory	352,790	352,790
Unsatisfactory	44,755	44,755

Management controls livestock numbers so that livestock use is within present grazing capacity. Range improvements may be constructed to protect and enhance the wilderness resource in the presence of grazing.

2. Vegetative manipulation is not used for range improvement, except as a result of prescribed fire.

3. Riparian areas will be managed to achieve and maintain satisfactory riparian conditions as described in the Forest-wide prescription. This may be accomplished through the use of structural improvements, movement of livestock or the exclusion of livestock.

Watershed & Soil Maintenance (DU 34, 46)	F03, K04 552, 553	1. Watershed treatment is a low priority in this management area. Restore damaged watersheds to satisfactory condition. Watershed restoration may consist of channel stabilization, and revegetation using native or non-native species. Non-native species will be used only in emergency situations when suitable native species are not available. See Appendix D for details of activities.
Lands Administration (DU 42)	J04, J13 J15	1. Act on all land exchange offers involving acquisition of private land.
Rights-of-Way Acquisition (DU 44)	J18	1. Attempt to acquire needed rights-of-way to provide public access to wilderness areas. Coordinate with other agencies to acquire public access and develop public parking for trails.
Fire & Fuels Management (DU 56, 57)	P08, P09 P12, P14 P15, P16	1. Utilize prescribed fire to reduce risk, enhance wilderness values including maintenance for T&E habitat and to permit lightning to more nearly play its natural ecological role. 2. The management area is divided into fire suppression zones 1 and 2 based on objectives for resource protection and cost of suppression. See Section 5 for definitions of zones.
Insect & Disease Management	P34, P35 P36	1. Outbreaks of insects or disease will not be controlled, except where there is a clear and imminent danger to timber or other values outside the Wilderness, and then, only by approval of the Regional Forester.

MANAGEMENT AREA 14

Management Emphasis and Intensity: Manage to perpetuate the unique wildlife or vegetative species. Improve and manage riparian areas (as defined by FSM 2526, Riparian Watershed Management) to benefit riparian dependent resources. Recreation activities and other uses may occur to the extent they do not degrade the unique values. Facilities may be allowed and maintained for the purpose of protecting these resources. Visual quality objectives will be met or exceeded.

Management Area Description: Lands within the South Fork of Cave Creek (Chiricahua Mountains) and Guadalupe Canyon (Peloncillo Mountains) that have been identified as supporting flora and fauna associations that are unique enough to require special management practices, including formal designation as a zoological or botanical area. Includes known, essential habitats for threatened and endangered plants and animals.

Capability Area Types: 2P, 2PH, 6P, 6PH, 6HM, 6M, 7P, & 11AR.
Total acres = 4,240.
(762 acres - South Fork and 3,478 acres - Guadalupe Canyon)

Specific Management Prescription

Timber Suitability: All Acres Unsuitable.
Proposed Vegetation Manipulation: None

Management Practices	Activities	Standards and Guidelines
Dispersed Recreation Management (DU 1)	A14, A15 L23	1. Maintain trails to level 3. See Appendix E for definition of levels. 2. Leave road into South Fork open for access to recreation residences and to existing trail and day use picnic area. 3. Use of motorized vehicles is permitted only on designated roads. 4. Emphasize semi-primitive non-motorized recreation opportunities above South Fork Picnic Area and roaded natural opportunities below. 5. Manage dispersed use at a level of 50% less than standard and 50% standard. 6. Recommend the designation of the South Fork of Cave Creek (outside the wilderness area) as a zoological-botanical area and portions of Guadalupe Canyon as a zoological area. A ten foot wide strip along each side of the South Fork Road, around the South Fork picnic area and around the existing recreation residences will be excluded from this designation. They will be part of management area 3A. 7. Develop an environmental education program in South Fork by considering the following techniques: a. Employing interpretors and educators (volunteers or paid). b. Publishing plant and animal guides and visitor etiquette brochures. c. Building environmental displays. d. Conducting visitor programs. 8. Monitor effects of hunting and trapping on wildlife and safety of people. This includes the use of firearms and air guns. Consider prohibiting these activities if necessary through a Forest Supervisor's closure. 9. A Forest Service permit will be required for plant collection and for research activities that involve placing anything on the National Forest. Collection permits will

MANAGEMENT AREA 14 (continued)

Management Practices	Activities	Standards and Guidelines
		be locally available in the Cave Creek area within availability of personnel and volunteers to issue them. Permits will be used as a tool to monitor resource use and potential impacts.
Visual Resource Management (DU 2)	A03	1. Manage the following acres at the indicated Visual Quality Objectives: 4,240 Acres Retention 100%
Developed Recreation Management (DU 5)	A11, A13 A16, L19	1. Complete site plan for South Fork Picnic Area during first period. 2. No new recreational development except as needed to rehabilitate existing developed sites. 3. Existing recreation residences may remain in place subject to terms of permit renewal and review procedures. 4. Maintain the road in South Fork to level 4. Maintain at times which will not disturb nesting birds. See Appendix E for a definition of levels. Install signing or speed bumps (topies) as necessary to encourage safe traffic speeds.
Wildlife & Fish O&M (DU 10)	C01, C02 C12	Under this prescription the general objective is to emphasize non-consumptive wildlife recreation activity. Management plans for designated national zoological areas will be completed in cooperation with state and federal wildlife agencies and other wildlife and plant oriented groups and agencies. Specific standards and guidelines for management of wildlife are shown in the Forest-wide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives: 1. Maintain and improve current habitat for federally listed plant and animal species and work toward delisting. 2. Maintain or improve current levels of occupied habitat for: Apache fox squirrel white-tailed deer mule deer javelina pronghorn cottontail raptors Mearns' quail Gould's turkey Merriam's turkey coppery-tailed trogon sulphur-bellied flycatcher beardless flycatcher thick-billed kingbird Bell's vireo blue-throated hummingbird Arizona ridge-nosed rattlesnake Arizona trout 3. Allow nongame recreation use demand to occur while maintaining occupied habitat for species listed above. Future limits on nongame use may be avoided by implementation of

MANAGEMENT AREA 14 (continued)

Management Practices	Activities	Standards and Guidelines
		an effective environmental education program. (See Dispersed Recreation Management guidelines).
Wildlife Habitat Maintenance (DU 11)	C09, C10, C11	Maintenance of existing structures and development of new structural and nonstructural improvements will be based on guidelines shown in the Forest-wide prescription. They are intended to meet the following objectives:
T&E Plant Habitat Improvement (DU 12) Game Habitat Improvement (DU 14) Nongame Habitat Improvement (DU 15)	C03, C05 C06, C08	1. Maintain quality of forage for: white-tailed deer mule deer Merriam's turkey Gould's turkey
		2. Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and memorandums of understanding. Also improve habitat for federally listed plants and animals following these same guidelines.
Range Management O&M (DU 16)	D02	1. In the South Fork Area, manage suitable rangeland at level C with the utilization level established at 30% use by weight of key species in key areas. In the Guadalupe Canyon Area manage suitable rangeland at levels A or D. See Appendix C for definition of management levels.

Projected Range Condition

Condition	Acres Period 1	Period 5
Satisfactory	3,604	3,816
Unsatisfactory	636	424

Timber Sale Preparation & Administration (DU 19, 21)	E06 E07,478 479	1. Removal of vegetation is limited to research and educational activities under permit, salvage operations, invading species, and maintenance and improvement of wildlife habitat and visual quality.
Watershed & Soil Maintenance & Improvement (DU 33, 34) (DU 45, 46)	F05 F03, F06 K05, K04 K06, 552	1. Watershed treatment is a high priority for this management area. Watershed maintenance and improvement may consist of channel stabilization, and revegetation using native species. See Appendix D for details of activities. 2. Manage all programs to eliminate or minimize onsite and downstream water pollution.
Minerals Management (DU 36)	G07	1. Recommend withdrawals from mineral entry to protect essential habitats for threatened and endangered species and recreational opportunities and facilities investments. 2. There will be no removal of mineral materials. 3. Recommend no surface occupancy for leasable minerals.
Fire & Fuels Management (DU 56, 57)	P08, P09 P11, P12 P15, P14	1. The South Fork Area is within fire suppression zone 1 and the Guadalupe Canyon Area is within fire suppression zone 2. See Section 5 for definition of zones.

MANAGEMENT AREA 14 (continued)

Management Practices	Activities	Standards and Guidelines
		2. Use prescribed fire to maintain or improve the unique vegetation or wildlife species.
		3. Fuel treatment may consist of broadcast burning, piling and burning, lopping and scattering, or fuelwood gathering.
		4. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.
		5. Prescribed fire will be used to reduce fuel hazard and enhance wildlife habitat.
		6. Within foreground distance zones of sensitivity level 1 and 2 (trails, roads, use areas and water bodies) require 100% treatment of all activity slash.
		7. Burn debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.
		8. Outbreaks of insects or disease will be controlled if there is a significant danger to the recreation uses or the unique vegetation or wildlife species or if it poses a threat to other uses outside the zoological area.

5. Summary of Fire Management Activities

The Forest has been divided into two fire suppression zones. These zones are based on resource management objectives with consideration of property and resource values to be protected. The following fire suppression zones are shown on the Fire Management Map.

Once the final alternative is selected and the final plan is implemented, any fire suppression zone boundaries not coinciding with management area boundaries will be used to further subdivide the management areas as necessary to clearly incorporate the zones into management areas.

Each wildfire ignition requires an appropriate suppression response. This response will be one that most efficiently meets fire management direction under current and expected burning conditions. The response may range from a strategy of prompt control to one of containment or confinement. Life and property will be protected in all suppression responses.

Fire Management Zone 1:

The appropriate suppression response in this zone will be predicated upon preventing fires from reaching or damaging high value resources and improvements. Containment and control will be used to accomplish this objective during very high and extreme fire danger.

Fire Danger Class	Appropriate Response
(1) Low	Confinement, Containment or Control
(2) Medium	Confinement, Containment or Control
(3) High	Confinement, Containment or Control
(4) Very High	Containment, Control
(5) Extreme	Containment, Control

Control for Danger Classes Very High and Extreme will be accomplished through maximum use of people and equipment needed to control and suppress any wildfire within as short a time as possible, by the most direct method possible.

Fire Management Zone 2:

The appropriate suppression response in this zone will be predicated upon responses that will suppress wildfires at the least cost with acceptable damage to improvements, and maintenance of sufficient forage to sustain livestock grazing operations and ground cover to keep watersheds in satisfactory condition. Confinement, containment, and control will be used to meet these objectives.

Fire Danger Class	Appropriate Response
(1) Low	Confine
(2) Medium	Confine
(3) High	Confine
(4) Very High	Confine, Contain, Control
(5) Extreme	Confine, Contain, Control

The appropriate response will be accomplished through minimum use of people and equipment.

For each fire, the responsible line officer shall evaluate and document the suppression response prior to each subsequent burning period. If the response is no longer consistent with fire management direction, or is anticipated to become inappropriate, the fire shall be considered an "escaped fire".

Definitions:

Confine: To limit fire spread within a predetermined area principally by use of natural or preconstructed barriers or environmental conditions. Suppression action may be minimal and limited to surveillance under appropriate conditions.

Contain: To surround a fire, and any spot fires therefrom, with control line as needed, which can reasonably be expected to check the fires spread under prevailing and predicted conditions.

Control: To complete the control line around a fire, any spot fires therefrom, and any interior islands to be saved, burn out any unburned area adjacent to the fire side of the control line and cool down all hot spots that are immediate threats to the control line, until the line can reasonably be expected to hold under foreseeable conditions.

Escaped Fire: A fire which has exceeded, or is anticipated to exceed, pre-planned initial action capabilities or the fire management direction.

6. Monitoring Plan

INTRODUCTION

The purpose of monitoring and evaluating the implementation of the Forest Plan is to inform the decisionmaker of the progress toward achieving the the goals, objectives, and standards and guidelines.

Monitoring will determine:

- if the management prescriptions are applied as directed.
- if standards are being followed.
- if the Forest is achieving the objectives of the Forest Plan.
- if the application of management prescriptions is responding to public issues and management concerns.
- if the effects of implementing the Forest Plan are occurring as predicted.
- if the costs of implementing the Forest Plan are as predicted and are acceptable.
- if management practices on adjacent or intermingled non-Forest lands are affecting the Forest Plan goals and objectives.

A detailed annual monitoring action program will be prepared as part of the total Forest annual program of work. This annual monitoring program will include the details on the amount and location of monitoring to be accomplished based on the approved program of work and funds available for monitoring. Specific locations, intensity of sampling, person-days required, and costs will be identified in the annual monitoring program.

Evaluation of the results of the site-specific monitoring program will be documented in the annual evaluation report. The significance of the results of the monitoring program will be analyzed and evaluated by the Forest interdisciplinary team. These evaluations will address changes in standards and guidelines, costs, and outputs and recommendations for plan amendments or revisions.

Based on the evaluation, any need for further action is recommended to the Forest Supervisor. The recommendations can include:

- no action needed. Monitoring indicates goals, objectives, and standards are being reasonably achieved;
- refer recommended action to the appropriate line officer for improvement of application of management prescriptions;
- modify the management prescription as a Forest Plan amendment;
- revise the projected schedule of outputs; or
- initiate revision of the Forest Plan.

The documented file of the Forest Supervisor's decision resulting from monitoring and evaluation is maintained for future use in amending or revision of the Forest Plan. An annual evaluation report of these decisions will be prepared and sent to the Regional Forest for his consideration.

The Forest Plan's monitoring requirements follow. For each activity, practice, or effect to be monitored, one or more measurement techniques are specified. A frequency for measuring and compiling data on the monitored item is established (FREQUENCY). The expected precision and reliability of that measurement is stated. (Precision is the exactness or accuracy with which the data will be collected; reliability is the degree to which the monitoring accuracy reflects the total Forest's situation). TIME FOR REPORTING establishes the frequency for an evaluation and reporting of the results of monitoring.

Abbreviations:

AGF	=	Arizona Game & Fish
AMS	=	Analysis of the Management Situation
EA	=	Environmental Assessment
MA	=	Management Area
MAR	=	Management Attainment Report
NMGF	=	New Mexico Game & Fish
RIM	=	Recreation Information Management
SO	=	Supervisor's Office
TES	=	Terrestrial Ecosystem Survey
U of A	=	University of Arizona
USFWS	=	U.S. Fish & Wildlife Service

RECREATION 1

1. ITEM MONITORED:

   Actual dispersed recreation use in Recreation Opportunity Spectrum (ROS) settings.

2. PURPOSE:

   Federal Regulation, sample output.
   Forest issue related.

3. MONITORING METHOD:

   1) Recreation Information Management Report (based on District Ranger estimates).

   2) Inspection of heavily used dispersed areas, including evaluation of vegetative deterioration and soil erosion.

   3) Compile ORV restriction violation records.

4. FREQUENCY:

   Annual

5. EXPECTED PRECISION/RELIABILITY:

   RIM Level 5 for all dispersed areas.

6. TIME FOR REPORTING:

   Years 3, 6 and 9.

7. COST:

   $100 each report for each Ranger District with heavy use or complex reporting units, $25 each report for other Districts. Total annual cost (includes reports) is $550.

8. EVALUATION:

   Compare actual use records for a five year time period to project use by ROS setting. If use exceeds 30% of projected use and/or the trend in ORV violations increase 30% over current violations, the ID Team will evaluate and make recommendations to management.

RECREATION 2

1. ITEM MONITORED:

   Developed site use, Public and Private sector.

2. PURPOSE:

   Federal Regulation, sample output.
   Forest issue related.

3. MONITORING METHOD:

Recreation Information Management Report, Visitor Use Report, (based on District Ranger estimates and on actual count of tickets sold or other counts by private sector operators).

4. FREQUENCY:

Annual

5. EXPECTED PRECISION/RELIABILITY:

RIM level 5 for all sites except developed sites in private sector (ski areas, campgrounds, etc.) level 3.

6. TIME FOR REPORTING:

Years, 3, 6 and 9.

7. COST:

$150 each report for heavy use Districts, $25 each report for light use Districts. Total annual cost (includes reports) is $800.

8. EVALUATION:

Compare actual use to projected use. Average actual use for each 3 year reporting period. If actual use is under by 10% or is over by 30%, the ID Team will evaluate and make recommendations to management.

RECREATION 3

1. ITEM MONITORED:

Recreation use satisfaction.

2. PURPOSE:

Federal regulation, sample output.
Forest issue related.

3. MONITORING METHOD:

On the ground interviews with recreation users. Twenty sites for one day each.

4. FREQUENCY:

Annual

5. EXPECTED PRECISION/RELIABILITY:

± 20%/± 30%

6. TIME FOR REPORTING:

Years 1, 5 and 8.

7. COST:

Total annual cost (including reports) is $2000.

8. EVALUATION:

Compare user perception with projected use and satisfaction. If 30% or more of responses are below satisfaction level anticipated, evaluate.